

THE MEDICAL NEWS.

A WEEKLY JOURNAL OF MEDICAL SCIENCE.

VOL. 82.

NEW YORK, SATURDAY, FEBRUARY 7, 1903.

No. 6.

SPECIAL ARTICLE.

REPORT OF THE COMMITTEE ON CONFERENCE OF THE MEDICAL SOCIETY OF THE STATE OF NEW YORK.

*Submitted to the State Society at its Annual Meeting
in 1903.*

At the last meeting of the Medical Society of the State of New York your president, in his Inaugural Address, after considering the reciprocal relations of the State and County Societies and the relations of the Medical Society of the State of New York to the National Profession, concluded as follows: "A thorough study of this subject leads me to the conclusion that the unification of the regular profession is demanded, not only by the profession, but by the thinking public and that a reorganization can readily be brought about if reason shall prevail. *This must be accomplished without the loss of identity or individuality of this time-honored society, with dignity and without the sacrifice of principle.*" He insisted that the time had come for a final effort, which shall have for its object the gathering of the profession of this State under a single banner, upon a liberal platform, and with representation in the American Medical Association.

His recommendations seemed justified because of the encouragement received by the reorganization upon a broad platform of the American Medical Association; because it has become evident that the national body appreciates the injustice done to the Medical Society of the State of New York by its excommunication during so many years; because of a growing desire for amalgamation by individual and influential members of the profession of this State, representing over thirteen thousand consistent and conscientious workers, who fail to find any underlying principle of sufficient importance to justify the existing division; because of the influence which would be gained in the settlement of vital questions affecting the public welfare; and, finally, because of the undignified and hopeless position of a noble profession divided against itself without reason and justice.

It was recommended that the Medical Society of the State of New York appoint a committee of five to confer with an equal number representing the New York State Medical Association for the purpose of formulating a plan which shall have for its object the reorganization of the regular profession of this State, in a body in affiliation with the American Medical Association. The committee to report the result of its labors at the next meeting of the Medical Society of the State of New York.

"In the event of failure of the New York State Medical Association to appoint such a committee, or if the committee should fail to agree upon a plan of reorganization, the committee appointed by the Medical Society of the State of New York shall have full power, if it deems it expedient, to represent this Society before the American Medical Association, and the secretary of this body shall, if the majority of the committee desires, provide the individual members with credentials of delegates to the American Medical Association. The method of election or appointment of the committee, representing this society, shall be decided upon by the committee to which the President's Inaugural Address

shall be referred, and shall be ratified, as are all recommendations, by a vote of the society."

The committee on the President's Inaugural Address gave these recommendations its unqualified approval and suggested that the gentleman from whom it emanated be the Chairman of the Committee and empowered to associate with himself four representative members of this Society.

The Society having by vote approved the recommendations, the president became Chairman of the Committee on Conference and appointed as his associates Drs. Abraham Jacobi of New York City, A. Van der Veer of Albany, A. M. Phelps of New York City, and George Ryerson Fowler of Brooklyn. The untimely death of Dr. Phelps was mourned by the Committee. Dr. Phelps entered upon the deliberations with great earnestness, showing a desire to do all in his power to bring about the union of our State profession. He was present at two of the meetings held in New York and took an active part at these joint conferences. The Chairman of your committee appointed Dr. Frank Van Fleet as Dr. Phelps' successor and since the death of the latter, Dr. Van Fleet has been active on the Committee.

On February 5, 1902, Dr. F. C. Curtis, Secretary of the Medical Society of the State of New York, sent the following communication to the President of the New York State Medical Association:

"ALBANY, N. Y., Feb. 5, 1902.

"DR. ALVIN A. HUBBELL, President of the New York State Medical Association, Buffalo, N. Y.

"DEAR SIR: At a recent meeting of the Medical Society of the State of New York, held in Albany January 28 to 30, the following recommendation contained in the inaugural address of the then president, Dr. Henry L. Elsner of Syracuse, and indorsed by the Committee upon Recommendations in the Inaugural Address, was adopted:

"That the Medical Society of the State of New York appoint a committee of five to confer with an equal number representing the New York State Medical Association for the purpose of formulating a plan which shall have for its object the reorganization of the regular medical profession of this State, which body shall be in affiliation with the American Medical Association, and that the committee report the result of its labors at the next meeting of the Medical Society of the State of New York."

"I trust that the purport of this action of our Society is clear, and that it may meet with a response from the Association of which you are president. I am, dear sir,

"Yours very respectfully,
(Signed) "F. C. CURTIS, Secretary."

To which a supplement was added, dated

"ALBANY, N. Y., Feb. 7, 1902.

"DR. A. A. HUBBELL, President of the New York State Medical Association, Buffalo.

"DEAR DOCTOR: I would add to my letter of the 5th inst., reporting to you the action of the Medical Society of the State of New York in proposing to appoint a committee on conference with one to be appointed by the Association of which you are president, that the following committee has been appointed: Dr. Henry

L. Elsner of Syracuse; Dr. A. Jacobi of New York; Dr. A. Van der Veer of Albany; Dr. A. M. Phelps of New York; and Dr. George Ryerson Fowler of Brooklyn.

"Yours very truly,
(Signed) "F. C. CURTIS, Secretary."

At the Council meeting of the New York State Medical Association held on February 7, 1902, the following, introduced by Dr. Ferguson, was adopted:

"WHEREAS, The Medical Society of the State of New York appointed a committee to confer with a similar committee from the New York State Medical Association, with the view to a union of the two organizations, and notice of such creation of a committee having been officially given to our president, together with the request that a corresponding committee be appointed by us; therefore be it

"RESOLVED, That this Council (being the Executive Board of the Association) appoint for the purpose of conference in question a committee of five, consisting of Dr. E. Eliot Harris, as chairman, and Drs. William H. Biggam, Emil Mayer, Parker Syms and Frederick Holme Wiggan, to which committee the president is added as a member *ex-officio*. Seconded by Dr. Gouley, and carried unanimously."

The following letter was received by Dr. Curtis, bearing date of Feb. 8, 1902:

"FREDERICK C. CURTIS, Secretary.

"DEAR DOCTOR: The action of the Medical Society of the State of New York, as set forth in your communication of the 5th inst., has been referred by me to the Council of the New York State Medical Association, and it has appointed the following Committee of Conference: E. Eliot Harris, Chairman, 33 West Ninety-third St., New York City; Frederick Holme Wiggan, 55 West Thirty-sixth St., New York City; Emil Mayer, 25 East Seventy-seventh St., New York City; Parker Syms, 50 West Forty-seventh St., New York City; and William H. Biggam, 1197 Dean St., Brooklyn, N. Y.

"You will kindly inform your committee of this appointment and state that our committee is now ready to act in accordance with the purposes proposed, and may be addressed through the Chairman, Dr. E. Eliot Harris.

"Yours of the 7th, announcing the committee of the State Society, is received and I have sent the names to Dr. Harris.

"Yours truly,

(Signed) "ALVIN A. HUBBELL,
"President New York State Medical Association."

Upon receipt of this letter Dr. Curtis informed the chairman of your committee of the appointment of a committee by the New York State Medical Association, whereupon, the chairman wrote the following letter to Dr. E. Eliot Harris, Chairman of the Association Committee:

"SYRACUSE, N. Y., March 5, 1902.

"DR. E. ELIOT HARRIS, 33 West Ninety-third St., New York City.

"MY DEAR DOCTOR: Dr. Curtis, the secretary of the Medical Society of the State of New York, advises me of your appointment as chairman of a committee to represent the State Association at a conference with a committee composed of State Society men.

"As I have the honor to be chairman of that committee, I thought it would be wise to write to you concerning the time of our meeting. Beginning on March 13 our Medical College closes for twelve days, during which time it would be convenient for me to give the required time for this work.

"I note that your entire committee is composed of

New York men, and as a majority of our men live either in New York or near that city, the meetings in all probability had better be held there.

"Will you kindly let me know at your earliest convenience whether the dates included above would be agreeable to you and to the others of your committee? With many kind regards, I am,

"Sincerely yours,

(Signed) "HENRY L. ELSNER"

In answer the following letter was received:

"February 24, 1902.

"TO DR. HENRY L. ELSNER, Chairman Committee on Conference, Medical Society of the State of New York.

"MY DEAR DOCTOR: Your letter of February 21 was this day received. Our committee had already considered favorably the question that all communications between the two committees should be in writing, addressed to the respective chairmen, and that each committee could meet by itself to discuss all subjects pertaining to the work in hand, and its written views sent to the chairman of the other committee.

"It seems to me that this manner of proceeding will not only be time-saving, but will surely be much more desirable in every other particular than by the transaction of these affairs in joint session.

"Therefore permit me to suggest that your committee, through you, send to me the propositions which our committee is to consider.

"Yours very respectfully,

(Signed) "E. ELIOT HARRIS, Chairman."

After consultation with all the members of the Committee on Conference, representing the Medical Society of the State of New York, your chairman sent the following reply:

"SYRACUSE, N. Y., March 5, 1902.

"DR. E. ELIOT HARRIS, Chairman Committee on Conference, Medical Association State of New York.

"MY DEAR DOCTOR: In reply to your letter, bearing date of February 24, addressed to me as Chairman of the Committee on Conference of the Medical Society of the State of New York, in which you make the statement that your 'Committee had already considered favorably the question that all communications between the two societies should be in writing' and that each committee should 'meet by itself to discuss all subjects pertaining to the work in hand, and that its written views' should be 'sent to the chairman of the other committee,' and in which you lead the committee of the Medical Society of the State of New York to conclude that there shall be no conference, but simply correspondence between the two committees through the respective chairmen, I would say that the Committee representing the Medical Society of the State of New York was appointed to *confer, not to correspond*, with a similar committee representing the New York State Medical Association. The committee which I represent feels that the methods of deliberation can only be settled by a joint meeting of both committees in conference, where both sides may be permitted to express themselves freely, and where each side may take into consideration the views of the other, and where both, prompted by a liberal spirit, shall be willing to reach such conclusions as may result from such deliberation. Under no other conditions can the purposes for which we were appointed be accomplished, and the committee which I represent must refuse to act in any other way.

"Awaiting an early reply, I am, for the committee,

"Yours very respectfully,

(Signed) "HENRY L. ELSNER, Chairman."

To which the following answer was received:

"March 9, 1902.

"HENRY ELSNER, M.D., Chairman of the Conference Committee of the Medical Society of the State of New York.

"MY DEAR DOCTOR: I have the honor to acknowledge receipt of your letter of March 5, in which you say 'that the committee representing the Medical Society of the State of New York was appointed to confer and not to correspond, and the committee which I represent must refuse to act in any other way.'

"While the Committee of the New York State Medical Association believes the method of proceeding already suggested by this committee will not only be time-saving, but will surely be desirable in every other particular, nevertheless this committee, in the interest of a united profession in one State medical body, will be glad to meet the committee of the Medical Society of the State of New York at such time and place as may be agreed upon by the two chairmen. I am, for the committee,

"Yours very respectfully,
(Signed) "E. ELIOT HARRIS, Chairman."

The chairmen of the respective committees arranged for a joint meeting in the city of New York on March 19, 1902. At this meeting Dr. Henry L. Elsner was made chairman of the joint conference. It was understood by both committees that each was acting without power and that all questions must finally be referred to the respective State bodies for ultimate action and ratification. All the members of both committees were present and the following proposition of the Committee on Conference from the New York State Medical Association to the Committee on Conference of the Medical Society of the State of New York for the union of the two bodies was presented:

"Proposition of the Committee on Conference of the New York State Medical Association to the Committee on Conference of the Medical Society of the State of New York, for union of the two State bodies, presented March 19, 1902.

"Two years ago the New York State Medical Association, founded in 1884, was reorganized under a charter granted by the legislature. Its plan of reorganization is based upon those of several other State medical associations, and has been regarded by the Committee on Reorganization of the American Medical Association as a proper basis for the organization of the American medical profession in the different States.

"The Medical Society of the State of New York, formed under a law of 1806, was changed materially in 1813, after which nearly all the important privileges granted have been repealed by many subsequent acts of the legislature, so that the basis of its existence is, to-day, so involved as to be little understood.

"Therefore, in the spirit of meeting what we believe to be an honest desire to unite the regular medical profession in this State, we propose that the New York State Medical Association and the Medical Society of the State of New York be reconstituted, by an act of the legislature, into a State medical body to be known as the New York State Medical Society, of which all members in good standing in both bodies shall be charter members. The reconstituted State medical body shall be the representative in this State of the American Medical Association, by virtue of acceptance of the constitution and by-laws of the American Medical Association.

(Signed) "E. ELIOT HARRIS, Chairman,
"WILLIAM H. BIGGAM,
"EMIL MAYER,
"PARKER SYMS,
"FREDERICK HOLME WIGGIN."

To which the Committee answered as follows:

"The Committee of the Medical Society of the State of New York acknowledges the receipt of the communication from the Committee on Conference of the New York State Medical Association and begs to reply as follows:

"Proposition of the Committee on Conference of the Medical Society of the State of New York to the Committee on Conference of the New York State Medical Association for union of the two State bodies, presented March 19, 1902.

"In the spirit of meeting what we believe to be an honest desire to unite the regular medical profession in this State, we propose that the New York State Medical Association and the Medical Society of the State of New York, be reorganized by legal union into a single State medical body, to be known as the Medical Society of the State of New York of which all members in good standing in both bodies shall be charter members. The reconstituted State medical body shall be the representative in this State of the American Medical Association by virtue of acceptance of the constitution and by-laws of the American Medical Association, adopted in 1901, except Chapter XV.

(Signed) "HENRY L. ELSNER, Chairman,
"A. JACOB,
"A. VAN DER VEER,
"A. M. PHELPS,
"G. R. FOWLER."

It will be noticed that the committee representing the Medical Society of the State of New York made use of the words, "legal union," believing that whenever the two societies unite their interests and become a single body, such unification must of necessity follow by *legal means* and in accordance with the laws of the State of New York which laws your committee believed they would be unable to interpret without the advice of counsel. In reply to this communication the Committee representing the New York State Medical Association, submitted the following in writing:

"To the Committee on Conference of the Medical Society of the State of New York, acknowledging the receipt of and in response to its reply to the proposition submitted by the Committee on Conference of the New York State Medical Association.

"The plan of organization of the New York State Medical Association being acceptable to your committee, we will recommend that the reorganized State medical body be known as the Medical Society of the State of New York, and the term legal union be understood to mean applying to the legislature for a new charter.

(Signed) "E. ELIOT HARRIS, Chairman,
"WILLIAM H. BIGGAM,
"EMIL MAYER,
"PARKER SYMS,
"FREDERICK HOLME WIGGIN."

It will be noted that the Committee of the Association believed that "legal union" necessitated application for a new charter. Upon this point, the committee representing the Medical Society of the State of New York had taken no legal advice. However, your committee insisted that under no circumstances would any action be taken which would for one moment interrupt the existence of the Medical Society of the State of New York.

Your Committee in its answer to the Association committee at the second session of our joint conference on March 19, 1902, added the words, "Except Chapter XV," because it was held by the Association Committee that Chapter XV of the by-laws of the American Medi-

cal Association included the original code of medical ethics. Chapter XV of the by-laws of the American Medical Association published in 1901 reads as follows: "These by-laws shall be in effect and force after the close of the annual meeting of 1901, provided, that the sections shall elect delegates during the session for 1901; and provided further, that nothing in these by-laws shall be construed to repeal the rules of the Association governing the relation of members to each other and to the Association."

The third session of both committees was held in the city of New York, at the Academy of Medicine, April 18, 1902, at 3 P.M. There were present Drs. Harris, Biggam, Mayer, Syms and Wiggan, representing the Association and all the members of the committee representing the State Society. At this meeting it was still held by the committee representing the New York State Medical Association that in order to make *legal union* possible, the reorganized society must of necessity apply to the legislature for a new charter. The Association committee at this time and at all other times since its appointment has impressed the committee representing the State Society as being in earnest and equally anxious to bring about the union of the profession of this State, under one banner and at this time assured our committee that in the event of reorganization, the reorganized society, including the association members, would celebrate our one-hundredth anniversary in 1906 in a manner befitting a body with a history such as ours and a record to which all members in the reorganized society might point with just pride.

At this meeting methods of reorganization were considered and a method of reorganization was suggested which had for its basis the reorganization of the regular profession of this State in the Medical Society of the State of New York, which would entitle every member of a County Society to membership in the State Society and in the American Medical Association. At this meeting was also considered the advisability of divorcing the business and ministerial affairs of the State Society from the scientific and referring these to a governing body, very much after the method now followed by the American Medical Association. At both of these meetings the individual members of the committee representing the Medical Society of the State of New York agreed among themselves and in joint session that it would not be advisable for the Medical Society of the State of New York to send delegates to the meeting of the American Medical Association to be held in June, 1902. The minutes of the meetings were signed by the respective chairmen of the committees as an attest of the correctness of the report of the proceedings as they related to the principal matters discussed, without binding either society in any way.

Your committee, realizing the great responsibility reposed upon it, deemed it expedient to take legal advice that it might learn from a recognized authority what measures were necessary to bring about *legal union*, and for that purpose your chairman consulted the Hon. Charles Andrews, Ex-Chief Judge of the Court of Appeals of the State of New York and adds to this report the opinion of this learned counsel. It is as follows:

"The following memorandum has been made on consultation with me and has my approval.

"The Act of 1885, Chapter 379, enables the Medical Society of the State of New York to change its by-laws and create membership upon such a scheme as the society shall approve, without application to the legislature. Chapter 379 of the Act of 1885 reads as follows: 'Section I. The Medical Society of the State of New York shall have the full power to elect such a

number of permanent delegates or other members, as may be provided for by the constitution and by-laws of said medical society; said medical society being hereby empowered to regulate and control its own membership.' 'Section II. All acts and parts of acts inconsistent with this act are hereby repealed.' The Medical Society of the State of New York may amend its constitution and by-laws without further legislation by incorporating into its membership all members of the County societies. Therefore, the New York State Medical Association, if it shall so determine, may abandon its present organization and its members may become members of the Medical Society of the State of New York on a change being made by that Society in its conditions of membership. The transfer of the property of the Association may, under the authority of the legislature being obtained, be transferred to the Medical Society of the State of New York. It would seem that if this consolidation shall take place, it is as important to the members of the Association as it is to the Society, that it shall be done without abandonment of the charter of the Medical Society of the State of New York, so as to preserve the continuity of the Society, which for almost one hundred years has existed under its original charter.

"In all such societies, it is generally deemed one of its most important possessions to be able to trace back its history to the earliest possible time and all the members of the consolidated body will be equally interested in being connected with the early charter of the State Society.

"If the Medical Society of the State of New York were compelled to seek a new charter, this Society would be obliterated and a new society would take its place. The only legislation necessary is that affecting the Association and its rights of property.

"Therefore, in answer to the questions referred to me by Dr. Henry L. Elsner, Chairman of the Committee on Conference of the Medical Society of the State of New York, I answer as follows:

"Question I. In order to bring about amalgamation of two bodies organized and chartered as are those which we seek to amalgamate, is it necessary for us to apply for a new charter?

"To this question I answer No.

"Question II. If we reorganize these societies under a new charter, do we cease to exist? In other words, is there a moment of suspended animation?

"I answer this question in the affirmative.

"Question III. If we need not apply for a new charter, must we still go before the legislature to amend our constitution that amalgamation may take place, or has the State Society, under its present charter, power to take in the Association and change its method of organization to correspond with such changes as are finally agreed upon by both bodies?

"To this question, I answer, that it is not necessary to go before the legislature to amend your charter. Legal union may follow whenever the Medical Society of the State of New York shall, by vote, change its conditions of membership.

"Respectfully,

(Signed) "CHAS. ANDREWS.

"Dated Syracuse, N. Y., Dec. 17, 1902."

At the meeting of the American Medical Association, held at Saratoga, June, 1902, Dr. E. E. Harris of New York offered a code of medical ethics which was referred by that body to a committee of five. Section 2 of Art. IV of this proposed code reads as follows:

"The good of the patient being the sole object in view, any physician having a license to practise medi-

cine conferred by a medical board authorized by the State may be aided in consultation."

Your committee would also call your attention to Section 3 of this same Art. IV.

"No physician who indicates to the public that his practice is based on a sectarian system of medicine shall be entitled to professional fellowship or to recognition in medical bodies."

The constitution and by-laws of the American Medical Association adopted at an adjourned meeting of that Association held in Chicago immediately after the Saratoga meeting, no longer contains Chapter XV of the original by-laws. However your Committee has the assurance of the President of the American Medical Association and the committee representing the New York State Medical Association that the old code of ethics of the American Medical Association is still in existence. This information was given to your committee at the meeting of the joint conference held in New York at the Academy of Medicine on Oct. 3, 1902, when the members of the Association once more asked your committee to subscribe to the by-laws of the American Medical Association.

Considering the radical action taken by the Medical Society of the State of New York over twenty years ago, your Committee could not consistently take this step, nor could it suggest to your body submission to a code which changed conditions and the spirit of the times must of necessity efface.

At a meeting of the joint conference held in the city of New York on Dec. 19, 1902, the conference was honored by the presence of Dr. Frank Billings, the President of the American Medical Association, who journeyed from Chicago that he might be present and use his influence in favor of immediate amalgamation. Dr. Billings assured your committee that the old code was still in existence and unchanged. Dr. Billings also assured us, at the same time, that the Code of Ethics of the American Medical Association would not be considered binding upon State organizations.

Your Committee, in spite of the argument in favor of immediate amalgamation, earnestly made by Dr. Billings and the assurance by him and the representatives of the State Association, in affiliation with the American Medical Association, that dropping Chapter XV from the by-laws of the American Medical Association did not eliminate the original code of ethics of the American Medical Association, could not consistently withdraw its objection and assured both the President of the American Medical Association and the Committee representing the New York State Medical Association that the Medical Society of the State of New York was anxious to unite the profession upon a broad and liberal platform, one which it had reason to believe from the encouraging statements made by President Billings and the Association Committee the American Medical Association would adopt at its meeting to be held in New Orleans in May 1903, after which all matters of detail and recommendations to the respective bodies might be promptly and easily made.

In the unification of two powerful State bodies, like the Association and the Society, the method of organization becomes a perplexing question, requiring careful deliberation. Your committee feels that before final recommendations as to the method of organization of the reorganized Society can be made, it must come in the possession of further data. The will of the profession must be learned and given consideration. We ask for the power which shall bring us in contact with the individual members of County Societies that we may gather such information as shall, after mature consideration, lead to the formulation of a plan of re-

organization. Among the plans of organization thus far suggested, we might mention,

First.—The scheme by which all members of County Societies become members of the State body, thus abolishing entirely the delegate system. This reorganized State Society to have its various district branches, and a governing body to which shall be referred all matters of business including all ministerial functions.

Second.—Reorganization of the State Society which shall extend to the existing members of the New York State Medical Association permanent membership with a continuance of our County Societies and the delegate system.

Third.—A plan which shall grant to the individual members of County Societies the privilege of permanent membership in the State body, not making such permanent membership in the State body obligatory.

Fourth.—A proposition will in all probability be presented to the American Medical Association at its coming meeting, by which all members of County Societies shall, for a single fee paid to the treasurer of the respective County Society, become members at the same time of the State and National bodies.

The proposed scheme toward which the American Medical Association has been lending its influence tends toward unification of the profession of the entire country and has for its object the extension of its influence and the enrolling in that body, through the County Societies of all regularly educated physicians of this country.

These are a few of the suggestions concerning reorganization which have occurred to your committee. The question requires further thought and we believe that much valuable information can be gained by a thorough canvass of the State.

At the meeting held in the city of New York on December 19, 1902, your committee with all its force objected to the resolution which was presented by Dr. E. D. Ferguson of Troy and unanimously adopted by the New York State Medical Association at its recent annual meeting. It reads as follows:

"Resolved, That the report of the committee appointed to confer with a committee representing the Medical Society of the State of New York, for the purpose of devising a plan for the union of the New York State Medical Association and the Medical Society of the State of New York, is hereby approved.

"Resolved, That the plan presented at the joint sessions of the two committees by the committee representing the Association, whereby 'the New York State Medical Association and the Medical Society of the State of New York be reconstituted by an act of the legislature into a State medical body to be known as the Medical Society of the State of New York, of which all members in good standing in both bodies shall be charter members, and the reconstituted State medical body shall be the representative in this State of the American Medical Association by virtue of its acceptance of the constitution and by-laws of the American Medical Association' is hereby accepted by the New York State Medical Association as an expression of our sincere desire for a union of the medical profession in this State.

"Resolved, That the committee is hereby continued for the purpose of cooperating with any committee from the Medical Society of the State of New York to secure a charter from the legislature at its next session in 1903, which charter shall reconstitute the two State organizations into one State body, as set forth in the preceding resolution, but if the Medical Society of the State of New York shall fail to approve of such plan of union by a charter, to be secured at the approaching

session of the legislature in 1903, then this committee shall be considered as discharged, and the proposition of the Association withdrawn.

"Resolved, In case this committee should find occasion to apply to the legislature at its next session for the purpose of securing the said charter, it shall cooperate with the standing Committee on Legislation of this Association."

Your committee could not consent to the time limit insisted upon; it objected to the spirit of the resolution and believed that it was not in keeping with the earnest desire for harmony and unification so forcibly expressed at the various conferences with the committee representing the Association. Your Committee was assured by the Association Committee that its individual members would be ready to use their influence in favor of further conference after favorable action by the American Medical Association at its meeting in New Orleans.

The New York State Medical Association has during the past two years published a journal known as the *New York State Journal of Medicine*. During this time it has also published a medical directory of New York, New Jersey and Connecticut. Both of these have entailed an enormous expenditure of time and money. The medical directory is a worthy publication and speaks volumes for the energy of those who have placed it before the profession of these States. These publications have been losing ventures financially. Thus it will be seen, by reference to the report of the treasurer of the New York State Medical Association, page 337 of the *New York State Journal of Medicine*, December, 1902, that the total expense of publishing the *Journal* is as follows:

Total expense of publishing <i>Journal</i>	\$3,051.73
Incidental expenses	93.29
Total	\$3,145.02
Total receipts	2,168.20
Total cost to the Association.....	\$976.82
The Directory account is as follows:	
Expense of publishing Directory.....	\$4,967.54
Incidental expenses	651.97
Total	\$5,619.51
Total receipts, only.....	1,783.98
Cost to the Association to date.....	\$3,835.53

It will be seen therefore, that the loss to the Association from the publications of the *Journal* and *Directory* is \$4,812.35.

The expenses of the business office of the Association during the year 1901 was \$5,693.18. This included rent, \$150; salaries, \$3,799.84; insurance \$20; office incidentals, \$1,723.34; making a total of \$5,693.18.

The committee feels that if reorganized, the Society would not be able to bear these enormous expenses and could not therefore publish either the *Directory* or the *Journal*.

While we believe that an official directory of the medical profession of this State should be published annually, we are of the opinion that the work with its associated responsibilities might well be relegated to one of the many publishing houses ready and eager to undertake it, with facilities to make such a publication profitable.

The total expenditures of our State Society, including the publication of our *Transactions*,—an unbroken file of which to-day represents a possession of which any physician may well be proud—are in the neighborhood of..... \$3,000

The expenses of our business office, including the modest salaries of our treasurer and secretary are between..... \$500 and \$600
Our committees expend about..... \$500
The *Transactions* cost, including postage..... \$1,200
Cost of the annual meeting, between..... \$400 and \$500
Stationery, printing, receipts, etc., between \$200 and \$300

The incomes of the Medical Society of the State of New York and the New York State Medical Association in the event of reorganization, would be insufficient to meet such expenses as would be necessitated by the publication of the *Directory* and a monthly journal. It must be remembered that the receipts of the enlarged Society would not equal the combined incomes of the present Association and Society, for there is a surprisingly large proportion of Fellows affiliated with, and paying dues in, both bodies, who in the event of amalgamation, would pay but a single fee.

In reporting progress your committee wishes (I) To file its objection to any method of reorganization which shall in any way interfere with the life of the Medical Society of the State of New York. Therefore we are opposed to any legislative act in connection with the amalgamation of the Medical Profession of the State of New York. The opinion of Judge Andrews makes it clear that no such action is necessary. (II) Your committee having been assured that the old code of ethics of the American Medical Association is still in existence, does not feel that it is within its power to recommend that action be taken by the Medical Society of the State of New York, until the American Medical Association shall make it possible for the Medical Society of the State of New York to subscribe to its constitution and by-laws and written rules of order, consistently, without the sacrifice of principle. (III) The methods of gathering data which shall serve to formulate a plan of organization ultimately to be presented to this body for approval must be evolved after further conference and greater consideration than your committee has as yet been able to give to this important subject. (IV) The Medical Society of the State of New York cannot continue to issue the *Directory* and the monthly journal, now being published by the New York State Medical Association, in the event of reorganization.

A consideration of this report must prove to your body that this committee is in the midst of its work; that the many perplexing questions connected with the unification cannot be decided at this meeting; that there are many matters of detail which still demand attention and further conference.

For these reasons we beg leave to report progress; ask that our report be received and that further time be given to your Committee on Conference.

Respectfully submitted,

(Signed) HENRY L. ELSNER, Chairman,
A. JACOB,
A. VAN DER VEER,
GEORGE RYERSON FOWLER.
FRANK VAN FLEET.

Stegomyia at Baltimore.—At the meeting of the Medical Society of the College of Physicians and Surgeons, a symposium of papers on malaria, yellow fever and mosquitoes was held. Papers were presented by Drs. Hoal, Pagenelli, Melvin, Rosenthal and Hirschberg. From researches recently begun, it would seem that the yellow fever mosquito, *Stegomyia fasciata*, has been found at Sparrow's Point, one of Baltimore's suburbs.

ORIGINAL ARTICLES.

WHAT ADVICE SHOULD BE GIVEN TO A WOMAN SUFFERING FROM FIBROID TUMOR OF THE UTERUS?*

BY J. RIDDLE GOFFE, M.D.,

PROFESSOR OF GYNECOLOGY IN THE NEW YORK POLYCLINIC MEDICAL SCHOOL AND HOSPITAL; VISITING GYNECOLOGIST TO THE NEW YORK CITY HOSPITAL, ETC., ETC.

IT MAY be open to question whether fibroid or myomatous tumor of the uterus, as a disease, is increasing or not. Certain it is that many more of them are observed at the present time than formerly and vastly more cases are presenting themselves for treatment and operation. The multiplicity of cases has attracted increased attention to the condition, with the result that greater accuracy has been infused into statistics, and keener observation into the nature of the growths, their life history and ultimate termination.

According to Bayle, quoted by Bishop, 20 per cent. of all women, after the twenty-fifth year of age, suffer from fibroid, and, according to Klob, 40 per cent. of all women over fifty years of age.

Formerly, fibroids were classed among the harmless growths, and we were taught that, exclusive of polypoid tumors, they were never fatal; that their characteristic symptoms were pain and hemorrhage, and those due to mechanical pressure from their size. Indeed, the first patient upon whom I performed hysterectomy for fibroid tumor (it was a large tumor) had been counseled by one of the most prominent gynecologists of New York, at that time, not to allow any one to operate upon her, for, if she did, she would probably die; but to go to a dentist, have her teeth put in order, so that she could masticate her food and improve her digestion, and then she would live to as ripe an age as anybody. It so happened that the woman, although well past her fortieth year, was a maid, and her hand was being sought in marriage. She felt it necessary to get rid of her protruding abdomen, and hence the application to me for relief. Supravaginal hysterectomy was done, and recovery followed in due time, and marriage as well. I mention this case not to reflect upon the eminent man who gave the advice, but to illustrate the attitude of the Nestors of the profession twenty years ago toward this condition.

We now know that fibroid tumors of the uterus constitute a serious affliction; that they are a frequent cause of sterility; that in many instances they cause miscarriage; that they seriously complicate pregnancy and parturition; that they cause obstruction of the bowel, even producing strangulation; that they are a frequent source of inflammation; that the tumors themselves undergo all forms of degenerative processes, such as calcareous degeneration, necrosis, edematous infiltration, resulting in general sepsis in some instances and sometimes death. The last is, however, confined quite exclusively to submucous fibroids and usually of the polypoid variety.

* Read before the New York State Medical Association at the Nineteenth Annual Meeting, Oct. 20-23, 1902.

M. A. Tate, Cincinnati, O., has collected 39 cases of fibroids complicated by pregnancy, from the literature, and reported two which had occurred in his own practice. Analyzing these 41 cases: In six the tumor became gangrenous; hemorrhage was a prominent symptom, in that it occurred in 18 cases; three polyps were expelled spontaneously; seven polyps were removed; in three cases the polyp was not removed; in ten cases the labor was normal; in four cases labor was difficult; in two cases the child had to be destroyed, one was a case of turning and the other a breech; in four cases the tumor was discovered before, in all of the rest after, labor; four cases were reported in which labor set in before time; two were at the fifth and two at the seventh month. The following were the complications reported: Septicemia, 8; measles, 1; puerperal mania, 1; retained placenta, 4 cases. Treatment mentioned: Cold applications, ergot, iodids, whisky, vinegar, cloths in the uterus, packing of uterus with gauze and removal of tumor. Causes of death: Sepsis, 3; hemorrhage, 3; peritonitis, 1, and collapse, 1, making in all 8 cases. If all of the other cases, including nine without histories, recovered, there would be 33 recoveries and eight deaths, a mortality of 19.5 per cent.

While drawing this somewhat melancholy picture of this affliction I am not unmindful of the fact that occasionally fibrous tumors cease to grow and remain stationary for months and years, and even sometimes without any obvious cause decrease in size and even entirely disappear. Such a favorable termination is the rare exception, amounting, as Penrose says, to a medical curiosity.

In addition to the degenerative changes that are likely to occur, frequent and most serious complications of fibroid tumor of the uterus are pyosalpinx and ovarian abscess. The etiological relation between the tumor and the pus formation is not very clear, but the frequency with which this complication occurs in connection with fibroids points to septic infection from some degenerative process and usually of that part of the tumor lying directly in contact with the lining membrane of the uterus.

Another most annoying and serious symptom or complication of fibroid tumors of the uterus is the frequent menorrhagia or metrorrhagia which not only continues during the years of a woman's life that should be most active and useful, but delays the menopause from five to twenty years, the health meantime being not only impaired but in many instances completely wrecked.

With such dangers more or less imminent in all cases of advanced or large tumors, and with the knowledge that such conditions, with rare exceptions, are destined sooner or later to develop, what should be the attitude of the profession toward this condition, and what advice should we, as doctors or surgeons, give to a woman who presents herself afflicted with one of these growths?

Electricity as an agent for the eradication of the neoplasm or as a factor in retarding the

growth of these tumors has proved a disappointment, and the very small percentage of cases in which the tumor has disappeared after the application of electricity would lead us to class them among those rare instances in which spontaneous disappearance occurs. Moreover, the serious complications found at operation in cases previously treated by electricity, such as firm adhesions and disseminated pus pockets, rendering relief by operation increasingly difficult and dangerous, as attested by every operator of much experience in this field, condemns electricity as a harmful agent in the treatment of fibroid tumors of the uterus.

Curettage as a relief from intra-uterine hemorrhage occasionally is successful, but, as a rule, it requires frequent repetition, and in many instances becomes a dangerous procedure from injury done to the tumor encroaching upon the uterine cavity, thus opening a way for infection and degeneration, and leading in some instances to general sepsis and death.

Perhaps the general question involved in the interrogatory of my paper can be best answered by taking up *seriatim* the various classes of cases as they present themselves. And in this consideration let us not forget that there are immediate symptoms to be relieved as well as the saving of the patient from the possible dire experiences that, if left alone, await her.

Probably we are all agreed at the present time that a woman suffering from a fibroid tumor whose size is sufficient to exaggerate her figure and cause discomfort should be relieved of the neoplasm, and that promptly. Whether this operation should sacrifice the uterus or conserve it would depend somewhat upon the age of the patient and the location and character of the tumor. If the patient has reached or passed the menopause, little consideration need be given to the preservation of her generative organs, and a supravaginal hysterectomy being the simpler procedure, or a panhysterectomy, except in case of pedunculated fibroids, is the operation of choice. But in a woman still in the child-bearing period, especially if she has desire for offspring, the operation of choice is myomectomy, even at the expense of greater risk to the patient and in the face of prolonged and tedious operation.

In the second class of cases let us consider a woman ranging from twenty-five to forty years of age with a small tumor or tumors varying in size from a hen's egg to a cocoanut. What shall we say to her? If she be married, the tumors may be causing sterility; or, if by chance that disability has been overcome, the increased blood supply to the uterus will nourish the tumors and cause them to grow to a size productive of serious complication at parturition. Shall we, therefore, allow this woman to subject herself to such risks, or shall we, by removal of the tumors, anticipate pregnancy and save her from this calamity?

The answer is obvious and the operation should invariably be myomectomy wherever possible.

The indications for myomectomy increase with experience in dealing with these conditions, and growths that seemed on superficial inspection to be coextensive with the uterus are found in many instances to be limited and suitable for removal without ablating the uterus itself.

In this class we have been considering the young married women. Let us take the unmarried women who have hemorrhage or leucorrhea or dysmenorrhea or intermenstrual pain, and in whom examination reveals the presence of a small fibroid in the uterine wall. The course formerly pursued was to meet the symptoms as best might be, and the advice was to wait and see whether the tumor had a tendency to increase, but under no circumstances was the patient to marry. Within the past year a prominent gynecologist has insisted, before a medical society in this city, that the only course to pursue is the waiting policy, and the only advice to give such a woman is to avoid the married state.

To my mind, such advice is not consonant with the present status of surgical progress. To compel a woman, for the simple reason that she has a fibroid tumor of the uterus, by picturing to her the terrors of what might follow, to give up all the sweet companionship of life that comes from the married state, and condemn her to a life of celibacy, when, perchance, the opportunities for home and family and motherhood might otherwise be hers, is a cruelty for which there is no justification. Myomectomy offers such simple and such perfect relief in the hands of the skilful operator that the manly and only true scientific course to pursue is to advise that woman to submit at once to operation. Many of these tumors can be removed per vaginam, thus avoiding the risks of laparotomy and the unsightly scar, and the subsequent hernia.

Within the past three years I have performed myomectomy per vaginam in four cases, three of which have been reported and published. Of these cases, one had a single fibroid the size of a small orange situated in the posterior wall of the uterus just above the internal os. This was complicated by retrodisplacement of the uterus and extensive adhesions. After making an incision into Douglas' pouch and freeing the adhesions as far as they could be reached, the anterior fornix was opened, the remaining adhesions broken up and the uterus, with tumor, delivered into the vagina. Myomectomy was done, the round ligaments shortened to cure the displacement and the uterus restored to the pelvis. This operation was done in October, 1899. The symptoms previous to operation had been annoying in the extreme. The patient had been married ten years, one miscarriage nine years ago, no children, painful menstruation twice each month, lasting seven days; constant backache, nervous, irritable and anemic. She was completely relieved by the operation; she is experiencing normal menstruation and considers herself in perfect health. The second case was the wife of a physician and a physical wreck.

In this case I removed seven subserous fibroids per vaginam, curetted the uterus, repaired an extensively diseased cervix uteri due to bilateral laceration, shortened the round ligaments to cure retrodisplacement, and restored a lacerated perineum. One advantage of myomectomy per vaginam is the facility offered at the same sitting for multiple operations, as were done in this case. The patient had a smooth and comfortable convalescence, and left the sanatorium for her home, 300 miles from New York, on the nineteenth day after the operation. The third case had three small mural fibroids situated in the anterior wall of the uterus, the latter being in a position of extreme retrodisplacement. The tumors were removed through the anterior vaginal incision and the round ligaments shortened as in the previous cases. The fourth case was a counterpart of the first, the tumor being situated in the posterior wall of the uterus and the uterus retroverted and adherent. The same operation was repeated in this case and the result was satisfactory. From a thin, anemic, neurotic young woman afflicted with indigestion and insomnia the patient became a picture of health.

No doubt all of these myomectomies could have been done by laparotomy, but they could not have been done with so great safety to the patients, both immediate and remote, nor could the attendant complications have been dealt with so easily. In young women, especially unmarried women, for obvious reasons, the vaginal method is greatly to be preferred.

But if the tumors are too large to be handled even by morcellation through the vagina, laparotomy will afford facilities for their enucleation, leaving a functioning uterus, and a mind unclouded by a consciousness of mutilation.

The fourth class is one which requires perhaps the nicest judgment of all the conditions with which the surgeon is called upon to meet, viz.: cases of fibroid tumor of the uterus complicated by pregnancy. Here several courses are open to the operator. First, if the case is not too far advanced he can bring on a miscarriage and relieve the uterus of its contents, thus removing the complication and preparing the field for such treatment as might then be indicated. Secondly, the immediate operation of myomectomy is open for performance, leaving the uterus and its contents intact. Many instances have been reported in which the patient, after this operation, has gone to full term and been delivered of a living child. But the woman who submits to it has to face the danger of a probable subsequent miscarriage. The third course is to allow the patient to go to full term, with the understanding that if dystocia occurs Cesarean section may be performed and a living child secured.

To my mind, the dangers of this condition have been somewhat exaggerated. In my early experience as a physician I attended in confinement many colored women who harbored fibroid tumors, and in no one of them did anything more

serious occur during delivery than a delayed expression of the placenta.

Within the past year I have had a patient under my care who had formerly had a fibroid tumor of the uterus complicated by pregnancy. She was advised to go to full term and submit to a Cesarean section, which she did and secured a living child. Myomectomy was performed at the same time and she still retains her uterus. While this patient was under my observation for other cause than that under discussion, a patient was referred to me who was suffering from a fibroid tumor complicated by pregnancy, advanced to about the fourth month. While the main body of the uterus had risen above the rim of the pelvis, the tumor itself was caught under the promontory of the sacrum and resisted all effort to elevate it into the abdominal cavity. The desire for offspring was so strong in both the woman and her husband that they were ready to take any risk to secure a living child, but wanted to do it in the least dangerous and most certain way. After considering all the consequences in the case, my advice was to allow pregnancy to go to full term, and to prepare for the probable performance of Cesarean section. To this they finally consented, but when the allotted time had expired labor pains came on and the child was delivered naturally.

To sum up the situation, then, the proper treatment for fibroid tumor of the uterus, speaking in a broad way, is removal by operation, and that, too, immediately, whether the tumor be large or whether it be small, whether it be in a married woman or in a single woman, excepting from this rule only women of very advanced years, and those in which the tumor is complicated by pregnancy. In the last the course to pursue will depend largely upon the circumstances and conditions of the individual patient. As a rule, however, I believe that the majority of cases of fibroid tumor of the uterus complicated by pregnancy will go to full term and be delivered normally. In the hands of an expert, Cesarean section at full term is safer for mother and child than myomectomy during gestation in the rare instances in which such an extremity is required. I mean that it is better to take the risk of such a procedure, the necessity of which is very remote, than to destroy the child by inducing miscarriage or taking the risks of myomectomy.

EYE-STRAIN.

BY A. C. BARDES, M.D.,
OF NEW YORK.

OWING to our zeal for progress, civilized life of the present day is strenuous in its nature and debilitating in its influence. The vigorous and untiring efforts that are put forth in the performance of our various duties tax our powers of endurance to the utmost and materially lessen our ability to resist disease. As most of the work is of an intellectual nature, it follows that much of

the strain falls upon the eyes, and their keenness becomes dim long before the other senses are impaired. From our very infancy the eyes are called upon to undertake an amount of labor that is often in excess of their ability to achieve.

Weak eyes were formerly regarded as indicative of age and the consequent natural failing of the faculties; but nowadays the condition is widespread and affects persons of all ages. Uncivilized people, who do not apply the eyes for near work, never suffer from defects of vision. Their sight is as clear as that of the birds and remains so until they are bent with age.

It is estimated that nowhere do so many people suffer from eye-strain as in New York City, a fact attributed to the tall buildings and the density of the population. In many buildings the daylight is so dim that artificial light must be used throughout the entire day. The effort to do work under this disadvantage, combined with the strain of business anxiety and possibly a vitiated atmosphere, is soon attended by the enfeeblement of those parts that are used most—the eyes. Even the wealthy are not exempt. Many of them are compelled to make their homes in apartment houses, where a family suite is often nothing more than a hole in the wall, and the bad effects of insufficient light and deficient ventilation are very trying upon the eyes. The fashion of shrouding the windows of workrooms with curtains and dark shades is also injurious. The furniture, carpets and wall-paper are kept from fading, but this is done at the expense of the sight.

Eye-strain usually has its beginning in childhood, when the delicacy of the eyes exposes them to harmful influences that make no impression upon the eyes of adults. The fact that 80 per cent. of our school children have some ocular defect should admonish us to be on the alert to check the progress of eye disease by timely attention.

The common custom of compelling children of tender age to load their young minds with excessive learning is a serious mistake. Children should not be taught to take the exactions of school life too seriously, but should be permitted to spend much of their time in recreation. Study ought always to be interspersed with exercise. This takes off the nervous strain from the eyes and allows the physical development to catch up with the mental; preventing a top-heaviness and insuring the building up of a sound and healthy body, the very foundation of good sight.

Many of our children have their mental powers taxed to the utmost by an ever-increasing list of studies which they do not comprehend and which are soon forgotten. This course can be followed by but one result—weak eyes and delicate health. A delicate constitution and poor sight are so intimately associated that the physical development of a child is a fairly faithful criterion of the state of its eyes.

Practical education is a desirable acquirement, but young and growing children should not be

overburdened with an amount of study that will stunt their growth and dwarf their natural faculties. Ill prepared for the struggle of life is a person whose sole advantage lies in the possession of a massive intellect. Such an individual is likely to be afflicted with a delicate physique, troublesome eyes and round shoulders.

All persons who use the eyes to any great extent for near work are apt to suffer from eye-strain; for the activities of the eyes call for a large expenditure of nerve force. It is easy to understand how eye-strain produces headaches and other nervous disorders, even epilepsy, when we consider the complicated arrangement of the nerves of the eyes and their proximity to the brain. These considerations also explain why mental concentration and application are difficult and distressing when eye-strain is present.

Headaches are the most common as well as the most tantalizing accompaniments of eye-strain that physicians are called upon to treat. At times they cause such misery and general incapacity that they become a material hindrance to health and happiness and make the pursuit of an occupation impossible. All headaches that are brought on by using the eyes or are intensified by their use, can be put down as due to eye-strain, and no permanent relief can be expected until the strain is cured. Thousands suffer from eye-strain without knowing it. They go about their duties and appear in excellent health, yet they are disturbed by headaches and other petty annoyances without an apparent reason. Because they can see well they think that the eyes are perfect; the fact is, they unconsciously strain the eyes in order to see as clearly as they do.

Most people, when they have a headache, hasten to a drug store and procure some headache powders which give relief by lulling the pain. The ease that is afforded, however, is usually of short duration, and the distress soon returns with increased severity and to quiet it, the sufferer is forced to take a larger dose of medicine. This oft-repeated taking of drugs soon leads to the objectionable drug habit, which is quite prevalent in large cities and from which it is difficult to free the enslaved victim. Most of the so-called headache cures are positively harmful if they are taken repeatedly. They contain some form of bromide or other depressant, which weakens the heart, destroys the appetite and makes a person sickly and nervous.

It often happens that a sufferer from eye-strain, wearied by his vain endeavors to obtain relief from a persistent headache, concludes that the eyes are at the bottom of the trouble; but instead of going to a physician and having his eyes examined, he directs his steps to the store of the nearest optician, where he chooses in a haphazard way the glasses through which he sees best. In many cases these glasses are not at all suited to his eyes and are incapable of easing the strain.

Eye-strain is particularly troublesome at night, when artificial light is used. At first the sight is good and a person can read with ease and com-

fort, but gradually the sight begins to fade and the print becomes blurred and indistinct. The eyes ache, they feel heavy, tired and sore and they fill with tears and wink continually. This uneasiness continues to increase until it becomes unbearable, finally compelling one to lay aside the object that has engaged the attention and either to close and rest the eyes or else to turn the attention to something less tiring.

Eye-strain is caused by the ciliary muscle of the eye becoming strained and fatigued. This occurs in astigmatism, hypermetropia and in myopia. Weakness of the muscles of the eyes is accountable for much eye-strain, but this weakness is in turn usually dependent upon a hyperopia or a myopia. Exophoria is the most common form of muscular weakness; here the external ocular muscles are relaxed and cause a convergence of the eyes.

In order to see clearly, the rays of light, as they enter the eye must converge and come to a focus directly upon the retina. The near-sighted eye is too deep to permit of this, and the light comes to a focus before it reaches that point. On the other hand the far-sighted eye is too shallow, and the light comes to a focus behind the retina. In each case the eye is out of focus and the sight is poor. In astigmatism the cornea or else the lens is not perfectly symmetrical. As a result of this inequality of surface, the rays of light are not brought to a common focus as in the healthy eye, but converge at different distances and form two images at right angles to each other. To a person with astigmatism, all objects look confused and dull. Letters and figures may appear misshapen and to slant, and round objects like the moon seem oval. If such a person looks at two black lines which cross each other at right angles on a paper, and the paper is turned around, one of the lines is seen with perfect clearness but the other is indistinct.

There is a certain distance from the eye at which an object nearby can be seen better than at any other point. In the healthy eye this distance is about 18 inches and this should be the distance at which a book ought to be held. Near-sighted persons cannot see well at this distance, because the focus of the eye is too short, so they overcome the difficulty by bringing the object nearer to the eyes, or within that distance which will insure the focus being thrown upon the retina and giving clear sight. Conversely, a far-sighted person cannot bring the focus upon the retina unless the object is held far off and this distance is too great to allow small objects to be seen with clearness unless the accommodation is taxed and the eye is strained.

A healthy eye can see in the distance with as much ease and clearness as it can nearby. A near-sighted eye cannot do this. It sees near objects with tolerable clearness, but the sight for distance is poor. With a far-sighted eye the conditions are reversed; objects far away can be clearly seen, but small things close by, like the print of a book, are not plain.

Near-sightedness, although sometimes inherited, is usually brought on in youth by the excessive use of the eyes in study. It is generally met with in the upper walks of life; among students and other persons of culture, who habitually use the eyes for reading and lead a sedentary and enervating life. As a rule it first makes its presence felt between the tenth and twentieth years of age, when the eyes first begin to be used in hard and earnest study. It may increase up to the twenty-fourth year but after that time it remains stationary.

The eyes of a near-sighted person bulge somewhat. The pupils are large and the face is drawn and strained, from the habit of partially closing the eyes to keep out the excess of light. Near-sighted individuals can see nothing clearly that is more than a few feet away. When they read, they hold a book close to the eyes and in such a manner as to get as much light upon it as possible. They are prone to write in a small, cramped hand, and they prefer to read fine print. An object a few yards off looks to them dim and obscure and seems much larger than it really is. Near-sighted eyes are generally irritable and sensitive, especially to the effects of artificial light, which inflames and tires them. The eyes ache and feel sore when they are used for a long time, and black spots frequently appear before them.

Many persons reach middle-life without knowing that they are near-sighted until they chance to look through the glasses of a near-sighted friend and are surprised and delighted to find that they can see better with them than with the naked eye. They may have known that they could not see well in the theater nor read a sign across the street, but because they could read small print, if it was held close to the eyes, they thought the sight was not to be improved with glasses.

Far-sightedness dates from birth. Nearly all babes are far-sighted, but as they grow older the far-sightedness diminishes and eventually has a tendency to disappear altogether. In many instances an eye that is far-sighted in infancy becomes near-sighted in youth. Pronounced far-sightedness in young children is apt to be accompanied by a convergent squint. These children are not as bright as other children and at times are even dull and stupid.

A slight amount of hyperopia in a person who is otherwise in good health may not give rise to any inconvenience, but if the system is weakened by disease or else depressed by indoor living and a want of fresh air and exercise, the far-sightedness is likely to be very harassing. This in a measure accounts for the languor and sick headaches from which females who are anemic and nervous so often suffer.

Far-sightedness is particularly troublesome to growing children. They are frequently blamed for being backward and not wanting to learn, when the real fault lies in the fact that they cannot see clearly. Many far-sighted persons reach the age of twenty-five or thirty years and yet suffer no inconvenience, but if they lead an in-

active life, the hyperopia will sooner or later give rise to disturbances that make the wearing of glasses imperative.

After the forty-fifth year of age, all eyes have a tendency to become flattened, and the change is attended by a failing of the sight. This is the far-sightedness of old age. When this comes on, objects close by, like the print of a newspaper, can be seen with difficulty, but objects in the distance are as clear as ever. In this condition it is not unusual that a person in middle-life can tell the time by the clock, but not by the watch. The age at which the eyes begin to fail is not fixed. With some people it occurs before the forty-fifth year and with others it does not take place until after the fiftieth year.

Whenever persons of middle-age unconsciously move nearer the light when they read or sew, and at the same time hold the object quite a distance away from the eyes; or when the print looks dull, and the eyes seem heavy and strained and a feeling of drowsiness comes on, they are evidently suffering from the far-sightedness of age and need glasses to rest the eyes and assist the vision.

Occasionally we meet an aged person who can read or sew without glasses. Such persons have evidently been near-sighted in their youth, but as they have grown older the natural inclination of the eye to become far-sighted has been offset by their short-sightedness; so that in their old age the eyes are in a measure like those of a healthy young adult. Then again, it sometimes happens that a person has one eye which is natural and another which is short-sighted. The healthy eye is used for near work up to the time of middle life, and when it begins to fail, the near-sighted eye can be utilized, for by this time the change which it has undergone enables it to take the place of the disabled eye.

The natural way to relieve eye-strain is to give the eyes absolute rest for a period of time ranging from a few days to some weeks. The objection to this method is that it is both costly and inconvenient and the relief is but temporary, hence it becomes the part of wisdom to assist nature, and by means of glasses, and by attention to the health and avoidance of the conditions that have led up to the strain, to endeavor to accomplish a lasting cure. It is not always an easy matter to decide upon the glasses with which we may hope to cure a persistent eye-strain, and frequently a slight amount of uncorrected astigmatism will cause more annoyance than a high degree of myopia or hyperopia. Astigmatism is accountable for many nervous disorders that appear to have no connection with the eye. In a number of instances even attacks of epilepsy have entirely ceased after the astigmatism has been corrected with glasses.

The use of eyeglasses dates from as far back as the thirteenth century, but they did not come into general use until some centuries later, and it was not until the latter part of the nineteenth century that the selection of glasses became a science and received the careful attention of the physician.

In civilized society the number of persons who wear glasses is large, but the number who should wear them, but do not, is much larger. It is rightly said that the intelligence of a community can be judged by the number of spectacled persons it contains; for the more cultured the community the more near-sighted the inhabitants. Many individuals have an ill-founded aversion to glasses which cannot be overcome. Their pride or prejudice gets the better of their good sense and they would rather suffer from the annoyances of eye-strain than wear glasses. A common complaint is that when once worn, glasses cannot readily be discarded. Often this is true, for glasses are to weak eyes what shoes are to tender feet, and so long as they rest the eyes and ease the strain, it is proof that they are required.

As soon as we discover that a child has an optical defect, glasses should be provided for it. This prompt course will assist in restoring the sight and will prevent the many sequelæ of weak eyes. A child can begin to wear glasses after the fourth year, the constancy with which they are to be worn depending upon the seriousness of the complaint. If a child has a high degree of hyperopia and squints, the glasses must be worn constantly until the eyes are straight and the sight has been restored. If this is not done, the squinting eye, from want of use, will become practically useless. The giving of glasses to children ought to be supplemented with such hygienic measures as will prevent the return of the eye-strain. The child should be taught to sit upright and not stoop over the desk, nor bring the book closer to the eyes than 15 inches. The light should come from behind; the amount of study should be limited, and the health should be improved by means of nutritious food, outdoor exercise, gymnastics, and tonics. Most young adults who suffer from eye-strain, obtain the desired relief by the use of mild resting glasses. These glasses do not materially assist the vision, but they bring relief by taking the strain from the eyes.

As a rule near-sighted persons require glasses for distance only. They can see near objects by holding them close to the eyes, but occasionally the myopia is so great that a book cannot be read unless it is held but a few inches away. In this case an extra pair of glasses is necessary for reading. No one who suffers severely from myopia should engage in work that demands the incessant use of the eyes, if such a course can be avoided; for this is likely to increase the myopia and intensify the suffering.

Glasses for elderly people should be selected with reference to the use for which they are intended. If they are to be used for reading or sewing, they should be of a strength whereby a book can be read at a distance of 15 inches from the eye. A musician or an artist requires a pair that will give distinct vision at a distance of from two to three feet. When the selection of glasses is left to a person who has not worn them before, a pair is usually chosen which is too strong and likely to hurt the eyes. On the other hand, many

middle-aged people are actuated with a desire to conceal their age, and they injure the eyes by reading without glasses. Since the far-sightedness of age increases with advancing years, the glasses ought to be changed every few years and stronger ones given. If it becomes necessary to change them too often, we should suspect the presence either of cataract or of glaucoma, diseases that can be benefited by an operation only.

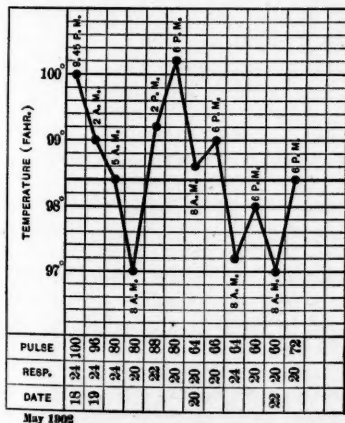
Much of the comfort and relief that glasses confer are dependent upon the skill with which they are selected and upon the manner in which they are adjusted to the eyes. It is not uncommon to see a person, especially a child, looking over the glasses instead of through them. Glasses should be worn as close to the eyes as possible without touching the lashes. If they are not properly fitted they may intensify the very strain, for the relief of which they were intended.

A FATAL CASE OF POLYARTHRITIS COMPLICATED BY CHOREIFORM SYMPTOMS AND VEGETATIVE ENDOCARDITIS.

BY AUGUSTUS A. ESHNER, M.D.,
OF PHILADELPHIA, PA.;

PROFESSOR OF CLINICAL MEDICINE IN THE PHILADELPHIA POLYCLINIC; PHYSICIAN TO THE PHILADELPHIA HOSPITAL; ASSISTANT PHYSICIAN TO THE PHILADELPHIA ORTHOPEDIC HOSPITAL AND INFIRMARY FOR NERVOUS DISEASES; PHYSICIAN TO THE HOSPITAL FOR DISEASES OF THE LUNGS AT CHESTNUT HILL.

A YOUNG man, seventeen years old, was admitted to the medical wards of the Philadelphia Hospital on May 18, 1902, with a history of having suffered for two weeks with pain in various joints, beginning in one knee, then invading the other knee and next extending to the ankles, and finally appearing in the elbows. He had slight elevation of temperature—not exceeding 100.2° F.—and corresponding acceleration of pulse and respiration (see Chart I). The only abnormal-



down by old adhesions. The heart was not increased in size. Its epicardial surface was smooth, the musculature dark brown in color, with yellow mottling beneath the endocardium. The wall of the left ventricle was slightly thickened, but the cavities of the heart were normal. The tricuspid and pulmonary valves also were normal. The mitral valve was thickened, and along the free edge of its leaflets dark-gray translucent vegetations were visible. The aortic leaflets exhibited somewhat similar bunches of vegetations immediately below the corpora arantii. Some of the vegetations were about the size of a pea. Otherwise the valves were delicate and smooth. The spleen was slightly enlarged and soft. Its surface was smooth and dark violet in color. On section it presented a purplish red appearance. Its substance was soft, but not friable. The Malpighian bodies and the visible trabeculae were not increased. The liver was fairly large, smooth and soft. Its surface was red with yellow mottling. Its cut surface was smooth and its lobules were fairly well marked. The periphery was yellowish, the center somewhat congested. The capsules of the kidneys stripped readily, leaving a smooth surface. On section the cortex appeared increased and the entire surface was cloudy and gray. The striæ were fairly well marked and the glomeruli generally were injected. The common bile duct and the gall-bladder were normal, although the former was obstructed by an enlarged gland near the duodenum. The stomach was congested. The esophagus and the intestines were normal, as were also the pancreas, the adrenals, the bladder and the prostate. The right wrist was opened and the cartilaginous extremity of the radius and the ulna exposed. The joint contained no excess of fluid and the cartilaginous surface appeared normal. The synovial membrane was, perhaps, a little hyperplastic, though delicate. The related tendons and sheaths were normal. The brain and cord were put aside for examination, but in consequence of some defect in technic factitious cavities developed. Careful macroscopical and microscopical examination by Dr. D. J. McCarthy failed to disclose any abnormality.

This case is interesting by reason of the association of polyarthritis, choreiform symptoms and endocarditis. I prefer to speak of "polyarthritis" rather than "rheumatism," and of "choreiform symptoms" rather than of "chorea." Rheumatism represents but one form—I am inclined to believe a specific form—of polyarthritis, but the differential criteria of the several varieties are as yet too uncertain to permit of dogmatism in this connection. It is all but certain that rheumatism is an infectious disease, and it seems probable that it is dependent upon one of the several cocci that have been isolated from the affected joints and endocardium, and some of which it has been possible to cultivate upon artificial media and by injection of cultures produce arthritis and endocarditis in lower animals, the same organisms again being obtained. Chorea likewise is looked

upon as an infectious disease, but nothing is known definitely of the exciting cause. The frequent association of articular symptoms and valvular lesions of the heart with chorea is strongly suggestive of a close etiological relation between this disease and polyarthritis, possibly rheumatism, but whether the exciting agent is the same in both instances, obviously cannot be determined in the present state of knowledge.

It is to be regretted that no bacteriological investigation was undertaken in the case here reported, as it might have been possible by this means to have determined the etiological factors and to have shed some light upon the general subjects of chorea and rheumatism and the relations, if any, that exist between these two affections. We have learned that various cocci may each give rise to a number of distinct lesions and it may eventually be found that rheumatism and chorea merely represent different localizations of the same infection. This apparently is the view held by Leonard Guthrie (*British Medical Journal*, May 18, 1901), who suggests that chorea is not a disease in itself, but merely a manifestation of rheumatism. A concrete instance of this relationship is reported by Westphal, Wassermann and Malkoff (*Berliner klinische Wochenschrift*, 1899, No. 29), who record a case of acute articular rheumatism, followed by chorea, and complicated by endocarditis, in which they succeeded in isolating from the blood, the brain and the endocardial vegetations a streptococcus capable of exciting polyarthritis in lower animals.

M. Reichardt (*Deutsches Archiv für klinische Medizin*, 72. B., 5. u. 6. H., p. 504) has recently recorded the results of post-mortem examination in two fatal cases of chorea, one occurring in the sequence of an attack of rheumatism. In both vegetative endocarditis was present, *Staphylococcus aureus* being isolated from the heart's blood in one case and cocci in masses and chains from the vegetations in the other. In both also inflammation, hemorrhage and degeneration of nerve-fibers in the central nervous system were found on histologic examination.

PROSTATIC CALCULI: WITH REPORT OF A CASE.*

BY JOHN F. ERDMANN, M.D.,
OF NEW YORK:

CLINICAL PROFESSOR OF SURGERY IN THE UNIVERSITY AND BELLEVUE HOSPITAL MEDICAL COLLEGE.

ON February 28, 1901, I had the pleasure of seeing a patient in consultation for my friend, Dr. Paffard of Brooklyn, in whom the diagnosis of dermoid cyst of the perineum had been made. He was a male, twenty-three years of age, from whom the following anamnesis was obtained: A family history perfectly negative in regard to anything that might have any bearing upon his present condition. He was an electrician by occupation and an amateur boxer. About one year before his visit to me some fluid was discovered trickling down his right thigh; upon observa-

*Read before the Genito-Urinary Section of the Academy.

tion he found that it came from a small spot on the right of his perineum. Although he had no injury nor venereal disease before this time, upon close questioning he recollected that for a time a sense of fullness and discomfort was present in this region; as a result of his seeking medical advice he was twice subjected to operative procedure, in the period of twelve months preceding his visit to me. Both were unsuccessful. Upon one of these occasions two stones or masses were removed that resembled teeth, hence the dermoid diagnosis, but upon subjecting these masses to a dentist they were claimed to be phosphatic accumulations. The patient also said that on occasion there was an increase in the flow of urine from the opening, which he felt confident was larger than before the first operation. He also said that he had seen no more foreign bodies nor felt them.

Upon examination I found a two-inch scar and a fistulous opening of good size presenting in the right half of his perineum and above and over the mid-portion of the transversus perinaeal muscle. Upon passing a probe a gritty sensation was observed within one-quarter inch of the skin, and a few drops of clear fluid were extruded.

A tentative diagnosis of a urinary fistula was made and operative procedure was advised and accepted. Within the week he came to my service for operation. A probe was passed into the fistulous tract as far as possible. Obstruction to its complete entry was due to impact with some gritty substance.

Then the right half of the perineum was incised in the line of the old scar, a pair of artery clamps introduced part way into the opening of the fistula and then the blades separated so as to produce dilatation of the orifice. Upon sponging a highly polished brown-yellow body resembling in shape a caraway seed was seen and removed; immediately behind this a pocket was found containing ten or twelve of these bodies varying in shape and size. These and many more were cleared out until finally I was able to introduce the index finger into what evidently was the right lobe of the prostate; from here on the probe passed directly into the bladder. Upon taking stock, fifty stones, varying in size from a caraway to a pumpkin seed, were found, while a few the size and shape of duck-shot were also present. These were all of uniform brown-yellow color and polished to such a degree as to lead one to think they had been subjected to a coat of varnish.

The fibrous tract of the fistula was dissected out and an unsuccessful attempt to close it by suture and by drainage was made. The patient was discharged in a week's time, being utterly unmanageable. Late reports from him are to the effect of his still having his fistula, but no stones have been observed since the day of his last operation.

A few days ago this patient was sent me by his physician at my request. An examination revealed a sinus discharging urine, attempts at

passing a probe into the bladder were impossible, he consented to another operation, which was done two weeks ago. The entire fistulous tract was dissected out, a ligature tied about its proximal end amounting practically to a lateral tie of the prostatic urethra, and the wound closed with skin drain. He has now a perfect result. While dissecting out the fistula we were surprised to find a mass of cheesy substance and some hairs in the excised material. The prostate upon examination presented a crescentic loss of substance in the right lobe of the prostate, so that its bulk was but one-half the size of that on the left side. The loss of substance on the right is readily accounted for by the pressure disturbance from the collection of calculi secured. The dermoid material, sebaceous matter and hair may have been the result of what originally was said to have been a dermoid or a coincident inversion cyst following the former operation that had been performed four years previously.

If we exclude those cases in which a calculus or calculi are found in the prostatic portion of the bladder and the urethra, or rather limit our discussion to those cases in which a calculus or calculi are found in the substance of the prostate itself, we are struck with the relative infrequency of this condition.

Calculi found in the prostatic portion of the bladder or urethra are usually of large size, rough, formed by successive layers of salt deposits, and are usually found in the extremely young or in patients of middle and advanced life, and usually accompanied with marked urinary and bladder symptoms.

While the true prostatic calculi are found in the young adult, they are usually numerous, are largely phosphatic throughout except possibly an organic centre, and present a peculiar yellow or brown-yellow highly glazed appearance. They do not give rise to bladder or urinary symptoms excepting when they perforate the bladder or urethra.

The origin of these calculi is practically that of a calcareous degeneration of some previous inflammatory condition affecting the cell element of the prostatic acini. These cells first undergo an amyloid change, forming the corpora amylacea, and the latter bodies finally undergo calcareous change. Subsequent additional deposits produce the increase in size of the calculi. This condition may affect only a small portion of the prostate, or it may involve from one-half to the entire prostatic body. By contact pressure, absorption of the intervening fibrous or muscular prostatic tissue takes place, cystic cavities containing numerous calculi (as in the case reported above) are formed, or by the invasion of infecting organisms abscesses may be formed and these in turn may rupture in one of four directions: either through the rectum, urethra, perineum, or into the bladder. Again, perforation may occur without the formation of pus as evidently took place in the case recorded.

The diagnosis is usually accidental, as these

bodies lie dormant for a long time. The passing of an instrument into the urethra scrapes over one or more of these protruding through the prostatic urethra, or the examining finger in the rectum will detect them; again, as a result of perforating into the bladder, the stream of urine will wash them out.

Treatment is distinctly operative and consists in making any of the accepted incisions for attacking the prostate.

Before the patient comes out of the anesthetic state, a careful search or washing of the bladder should be made, so that none of these calculi may be left in the bladder to form a nucleus for a vesical stone.

THE FACTS IN A CASE OF HEMATURIA.

BY CHARLES H. CHETWOOD, M.D.,
OF NEW YORK;

PROFESSOR OF GENITO-URINARY SURGERY, NEW YORK POLYCLINIC
MEDICAL SCHOOL AND HOSPITAL; VISITING SUR-
GEON, BELLEVUE HOSPITAL.

THE patient, an Armenian by birth, was admitted to the hospital Oct. 30, 1902; age 40; occupation farmer; family history negative.

Four years ago he was engaged in the work of carrying merchandise, and noticed one day while urinating that the urine was very dark in color, which was found upon examination to be due to the presence of blood. He sought medical advice in Smyrna without benefit. His trouble was then alleged to be due to stone in the bladder. Operation was suggested but was rejected by him. The hematuria has continued without cessation up to the present time.

One year ago he began to urinate once or twice during the night and about every three hours during the day. This has also continued up to the present time. He has never had a chill or febrile attack. The general appearance is anemic. There is no elevation of temperature; no pulmonary or cardiac lesion. He states that he sleeps well and that his appetite is good and the bowels regular. The urine when passed in two glasses is found to be uniformly bloody. The blood does not precede nor follow urination. It is freely mixed with the urine; and not of a smoky hue.

Combined lumbar and abdominal palpation on the left side is negative. On the right side the lower pole of the kidney is felt, and there is seemingly a mild amount of tenderness to pressure. Rectal examination finds the prostate not enlarged. The bladder is searched for stone and none found. Posterior-urethral endoscopic exploration is negative.

In preparation for cystoscopic examination the bladder is now injected with 1,000: 16,000 adrenalin chloride solution; retained ten minutes, and then with two-per-cent. solution of cocaine, which is retained six minutes; after which the bladder is filled with a two-per-cent. boric solution.

In spite of the adrenalin, the field of vision becomes quickly obscured by the continuous mixture of blood, and at this examination it is not satisfactorily determined whether or not the blood oozes

from the walls of the bladder or from the mouth of one of the ureters. The local anesthesia is insufficient and the patient is becoming rebellious; the examination is therefore terminated.

A specimen of urine was then sent to the laboratory, the report of which states: Reaction, acid; sediment, moderately marked; albumin, trace; urea, about two per cent.; specific gravity, 1.024; sugar, negative.

Examination of sediment shows large amount of blood forming bulk of deposit; no pus; small amount of mucus; no casts; no tubercle bacilli; a few epithelial cells from bladder. The laboratory report is summed up in the accompanying remarks: "The trace of albumin present seems accounted for by the blood. The gravity and relative amount of urea are within normal limits, and the microscopical examination fails to show elements referable to a lesion of the renal parenchyma or pelvis. In fact, the specimen fails to show any microscopical evidences indicating the seat of the hematuria; but its general character leads to the belief that it is probably in the bladder or prostate."

Following this urinary report and as a result of the observations made up to that time, I was inclined to the belief that the lesion was in the bladder; but had not satisfied myself that such was the case, on account of the inability to discover a stone or a neoplastic growth, and on account of the absence of such bladder symptoms as would naturally accompany either one or the other of these maladies. Yet the appearance of the blood in the urine was more that of a mixture of blood and urine than of blood in the urine, which by intimate mingling had become a portion of the urinary secretion.

After the expiration of several days (Nov. 4), a second cystoscopic examination was conducted under general anesthesia; the bladder having been first washed and a 1,000: 16,000 solution of adrenalin chloride injected and retained for seven minutes. At this examination a successful view was obtained. Both ureteral orifices were promptly brought into view, and a most satisfactory cystoscopic picture was demonstrated.

While the right ureteral orifice was kept in the field, repeated jets of bloody urine were seen to emit from the ureteral orifice. The secretion of the right kidney was so active, or the bleeding was so free that there was only about five seconds' intermission between the jets. The field of vision was soon clouded; but, by continuous washing of the bladder, repetitions of this view were easily obtained and demonstrated to the satisfaction of several of the assisting surgeons. The left ureter was then observed, and was seen to emit urine unstained with blood.

On account of the satisfactory result of the ocular observation, a systematic attempt to catheterize both ureters was not made.

The facts derived from the foregoing diagnostic study demonstrated that the lesion was located in the right kidney, and that the cause was some incipient morbid condition not revealed in the

urine, or a neoplastic growth, or possibly gum-mata.

In deference to the latter possibility and on account of a vague specific history, the patient was placed upon an anti-syphilitic course of treatment, which was pushed to full tolerance and continued for one week's time. At the end of this period there was no evidence of betterment, and an operation was suggested and accepted.

November 14, patient, under anesthesia, is placed in the prone abdominal position upon an Edebohls inflated bag. An incision was made from the twelfth rib downward and outward.

The kidney was exposed with great facility and brought outside of the wound. In general size and contour it was normal. The capsule was split along its convex border and the kidney opened into the pelvis in a search for stone; none being found. A catheter was then passed through the ureter down to the bladder without finding any obstruction. In fact, there was nothing about the general contour or gross substance of the organ which conveys satisfactory evidence of the cause of the trouble.

There was one spot on the anterior surface of the kidney, near the pelvis, about the size of a penny, which seemed somewhat more dense than the remaining portion of the organ. This was incised, and a small piece removed for microscopical examination.

A small gauze drain was inserted in the kidney, and another larger piece was placed under the organ for support. The wound was closed except at its upper portion.

The patient sustained the operation well, and twenty-four hours later, the urine contained a striking decrease in the amount of blood. Three days after the operation the urine, for the first time contained a marked deposit of pus, evidently derived from the kidney and the seat of operation. On the fourth day there was still no return of the hematuria, and even the drainage from the wound, which naturally contained a quantity of urine, was practically free from blood.

The result of the pathological examination by Dr. F. M. Jeffries of the small piece excised for this purpose is as follows: "The bit of tissue received presents a series of lesions, none of which may be said to be extensive. Perhaps the most marked departure from the normal are the parenchymatous and fatty degenerations, which are diffuse in character. Noticeable also is a slight congestion, both in the interstitium and the glomeruli, and a few small areas of hemorrhage into tubules. Two or three areas of hyalin degeneration are present, and one or two hyalin casts were found in situ. There are no evidences of either acute or chronic interstitial inflammations. The tissues were so fresh when received that the structures are maintained in an excellent state of preservation. The diagnosis resulting from the microscopical study of the sections is chronic parenchymatous nephritis."

The noteworthy features in this case are: The hematuria of four years' duration with a relative-

ly small amount of deterioration in general health; the negative result of the laboratory urinary analysis; the satisfactory cystoscopic picture; the absence of morbid appearance presented in the gross showing of the kidney at the operation; the microscopic evidence of kidney lesion; and the prompt cessation of hematuria following operation.

TRAP-DRUMMER'S NEUROSIS: A HITHERTO UNDESCRIBED OCCUPATION DISEASE.

BY CHARLES J. ALDRICH, M.D.,

OF CLEVELAND, OHIO;

LECTURER ON CLINICAL NEUROLOGY AND ANATOMY OF THE NERVOUS SYSTEM, COLLEGE OF PHYSICIANS AND SURGEONS, CLEVELAND; NEUROLOGIST TO THE CLEVELAND GENERAL HOSPITAL AND DISPENSARY; NEUROLOGIST TO THE CITY HOSPITAL.

THE strenuous life of our times is bringing forward a lot of new occupation neuroses, notwithstanding the fact that many of the older ones are disappearing under a more enlightened understanding of their causes, and the general lightening of the load of mankind by the use of machinery. As a class, these affections are little understood, and as entities often pass unrecognized. They should be more carefully studied, classified, and it follows, better treated.

Believing that the following case is deserving of record, and absolutely unique so far as my own experience and search through literature reveals, a brief report is felt to be worthy of printer's ink.

C. H. V., male, white, aged forty-one years, married, and has three healthy children; was recently referred to me by Dr. Marcus Rosenwasser. The patient was born in one of the French Cantons of Switzerland, and for twenty years has pursued the occupation of a trap-drummer. For the last two years he has been playing in a vaudeville theater which gives two exhibitions each day of the week except Sunday. Also on Monday he is compelled to practise in addition to the two regular performances. This practice, he informs me, is equal to one of the heaviest evening performances. He also states that his kind of work in a vaudeville theater is excessively heavy, requiring great rapidity and strength. His drum is beaten, as the name would suggest, by the operation of a pedal which is manipulated with his right foot, this gives him use of both hands to play the other drums, triangle and the various traps; hence the names, *trap-drum* and *trap-drummer*.

One year ago he began to have a cramping pain and sense of great exhaustion in the muscles, which, from his description, seems to have been located in the tibialis anticus and peronei of the right leg. In addition to this he experienced a feeling of constriction of the leg, as if the circulation had been stopped. Soon after this he began to have a sensation of heat in the knee-cap, also a painful sensation in the same area. He now complains bitterly of a burning pain in the knee. This is only apparent while playing or while walking rapidly. During the former he is compelled to stretch the leg often, and finally hit upon the expedient of raising his chair as a means

of securing an easier position of the leg. While these measures gave some relief they were not permanent. His greatest pain and difficulty is experienced while working with great rapidity. He states that each stroke requires from five to twenty pounds pressure, and sometimes a rapidity of movement equal to 150 or 180 strokes per minute. In the midst of one of these performances he suffers great pain on the left side of the right knee cap, which radiates about the whole knee. A sense of constriction is felt in the whole leg, and a cramped, distressing sensation of pain and exhaustion is experienced in the anterior muscular groups. After some hours of hard work the whole leg feels heavy, numb and lifeless.

Examination.—Patient is a well-developed man; all of his vegetative functions seem to be normally performed. His reflexes are normal; there is no loss of sensation, and outside of being addicted to excessive cigarette smoking I can find no psychopathic stigmata. The limbs are perfectly symmetrical, the right leg, however, is better developed than the left, the tibialis anticus and peronei being larger than their fellows of the opposite side. Also the intrinsic muscles of the right foot seem to be better developed than the left. The electrical formulæ are normal, but he experiences something of the same pain and cramp-like feeling following contractions induced by the faradic current.

After his first visit, I placed my heel upon the floor and attempted to make rapid and continued downward movements of the elevated foot. I soon experienced a sense of exhaustion of the anterior tibial group with a sense of heat and burning in those muscles as well as on the inside of the knee. The latter sensation persisted for some time. When he again visited me I caused him to assume a like position and work the left foot rapidly and continuously, when he discovered that he had produced a set of sensations on the left side analogous to those which appeared in the right leg while playing his drum. This convinced him of the correctness of my diagnosis, which he confessed of having previously doubted.

In all of these exhaustion or occupation neuroses we recognize the liability of any set of muscles to become affected by paralysis, cramps, or abnormal sensory sensations while engaged in continuously performing a set of movements that are the result of cerebral volition and attention, and which from their nature cannot be cared for by the automatic centers of the cord.

A motor and a sensory type is discernible. The motor type embraces those which are characterized by a peculiar paralysis or a cramp-like seizure of the affected muscles whenever the interdictioned act is attempted. The sensory varieties usually appear as a paresthesia or as neuralgiform pain. These varieties are rarely pure. Hardly a case presents itself in which we cannot discover two or three sets of symptoms characteristic of the mentioned subdivisions.

The technic of the occupation of the trap-drummer furnishes all of the necessary elements for

the production of an occupation neurosis. It is a series of educated movements, a rare development of kinesthesia in a set of muscles whose centers are very low in the cord and whose volitional stimuli travel farther than any others in the body. These stimuli are complexly derived by the way of the oculo-cortical apparatus, and by a volitional effort are transmitted to the motor cortex. Such a degree of precision and nicety of irregularity, yet always under perfect control, is demanded in the practice of this art that it is little wonder exhaustion of the cortical centers should occur.

The treatment of occupation neurosis is most discouraging. My recommendation in this case to attempt the use of the left foot is being carried out with apparent success.

612 Prospect Street.

EXPERIMENTS WITH A NEW QUININE DERIVATIVE.

BY F. PIRKNER, M.D.,
OF NEW YORK:

ATTENDING SURGEON TO THE EMERGENCY HOSPITAL OF JERSEY CITY, SURGEON, N. Y. SANATORIUM OF PHOTOTHERAPY, OF NEW YORK CITY.

My attention was called to saloquinine through reports in German medical journals about one year ago. The main feature of the remedy which interested me at once was the claim that it could be used as a substitute for the salts of quinine, in cases in which the latter were contraindicated on account of their well-known disadvantages.

Thinking that this new product might obviate their objections, I waited for an opportunity, and securing a supply began using it whenever indicated. Although I feel, as a rule, prejudiced against new products of modern chemistry contesting the value of old well-tried ones, the results in this instance were even better than I had anticipated, as will be recognized from the clinical notes which I have kept of such cases as remained under my personal observation long enough to permit the formation of an opinion. The results in the other cases have not all become known to me.

I gave saloquinine a trial in a variety of cases, no matter whether its use was strictly justified or its indication merely arbitrary. But even when there is an absolute indication for quinine as in the different forms of malarial fever, the use of the drug must often be avoided on account of certain concomitant conditions. Whenever we meet with patients suffering from acute or sub-acute disease of the middle ear, or from gastrointestinal irritation which quinine may easily increase, or with persons in whom quite small doses produce severe symptoms of cinchonism, we shall be glad to have a reliable preparation which can take the place of quinine salts, and under these circumstances should not hesitate to prescribe saloquinine.

Case I.—Intermittent malarial fever of the tertian type. Mr. S., thirty-two years old, medium height, well-nourished, muscular, ailing for the last three days, complained of loss of appetite and pain in the back, drowsiness and general

malaise. I saw him on August 10, after he had had a severe chill the day before at about five P.M., lasting 40 minutes. He has never had malarial fever before. After the chill he had become very restless and noticed "a fever ran through his whole body," as he described it. His face had become particularly hot, with throbbing in his temples and headache, keeping him awake for several hours on the night of August 9. When I saw the patient, 24 hours after the paroxysm, he had the appearance of weariness in striking contrast to his usual activity and bright looks. He complained of a general feeling of weakness and soreness, as if he had been beaten, and of slight headache. I made but a short examination regarding the special features of the case and found the temperature to be 98.6° F., the pulse 80, of good quality, without signs of fever. The spleen could be palpated without difficulty and was found, on percussion, to exceed four inches in a vertical line of the area of dullness.

The only medication that the patient had taken was a mild laxative which at the same time was said to contain a small quantity of quinine, but the dose had been so small that the amount of quinine contained in it can be considered as practically inert. I prescribed saloquinine, 15 grains, pulv. tal. dos. No. X, one powder every four hours for the whole of the following day; after this three powders every day until the last symptom of weariness and nervousness should have disappeared. As the powders could not be secured before late Monday afternoon, patient had a paroxysm of exactly the same character as two days before and at the same hour. At that time I succeeded in demonstrating in a fresh specimen of blood the segmenting forms of the tertian type of malarial plasmodia. Temperature 104.4° F., pulse 110. He took one powder in the evening and slept fairly well. He had been directed to stay in bed until he had finished all the powders. On the following day of intermission he took four powders and one more on the next morning (at seven o'clock) the day of the expected paroxysm. Because "he felt so much better that day," he discontinued the powders, and was lucky enough to be spared another chill. The day after that he returned to his work and has been well ever since.

The patient had had two well-pronounced paroxysms of tertian malarial fever, the etiology of a mosquito bite also being demonstrable. He took six powders within 36 hours, taking them dry followed by a swallow of water. The last 15 grains of saloquinine were administered 10 hours before the expected paroxysm, which is quite in conformity with the method of Dr. W. E. Fitch* (*International Medical Magazine*, April, 1902). It has always been my rule to give quinine as a prophylactic between the paroxysms, and that saloquinine in the case here reported has had such a prophylactic effect, must be considered

beyond any doubt. Although my patient took 90 grains before the next expected paroxysm, I should perhaps have been justified in expecting another mild chill before the paroxysmal symptoms would cease altogether. As the enlargement of the spleen could still be demonstrated on the evening of August 14, three days after the second paroxysm, I advised the patient to continue the powders as first directed.

Case II.—Double tertian malarial fever. C. W., boy, aged eighteen years, medium height, weight 120 pounds, slender build, mail-carrier in country town, has had malarial fever about seven or eight times during the last three years. Acute albuminuria had been present during the last two attacks of fever, six weeks and 11 months before. I saw the patient on August 10, after three days' sickness with double tertian fever, and after he had taken one dozen of two-grain quinine pills the day before. The night I saw him, at about nine o'clock, he had had a paroxysm of three hours' duration, and was perspiring very freely. I told him to stop the quinine and left five saloquinine powders, 15 grains each, with directions to take four during the night and one the following morning. Examination of the urine showed no albumin. He had no chills on the eleventh and twelfth, but his skin was still pale with a yellowish hue, the expression dull, the tongue markedly coated, appetite poor. On the twelfth he complained of pains generally, and weakness. I prescribed tinc. nuc. vomic., one dram; tinct. gentian comp., two ozs.; syrup hypophosph., ad., three ozs.; S., one dram three times a day; and saloquinine, 15 grains, pulv. tal. dos. No. XII, one powder three times a day. The patient took only three powders each day on August 13, and 14. As he felt very much improved on the fifteenth, he went back to his work. On the morning of August 19 I was called again, because he had had a severe chill the night before and passed a little blood with his urine in the morning. He took three 15-grain powders during the 12 hours after the onset of this last paroxysm. The remaining three powders I withheld purposely. Examination of the urine in the morning showed only a few granular casts, partly studded with erythrocytes. In a fresh specimen of blood I found two groups of the *Plasmodium malariae*, pigmented granules, living hyaline forms, swollen red blood corpuscles; no plasmodia in the erythrocytes of the urine. At about 4 P.M. on August 19 the patient became nauseated and complained of severe headache. When I arrived at about 5 P.M., he made the impression resembling a yellow-fever subject, although more pallid and not with the characteristic lemon hue, complaining of pain in the calves, his skin cool and yellow, the tongue thickly coated and red beneath. While I was taking the temperature, which was 105° F., the patient shivered violently, the face and finger nails becoming cyanotic. The pulse was hard and bounding, 125 beats per minute. The spleen was very large and soft. The urine was scanty, dark, and

* Dr. Fitch says: "In quotidian fever the drug should be administered eight hours before the next expected chill. In tertian fever it should be administered 12 hours before the expected paroxysm."

bloody. Its examination showed pale and dark granular and epithelial casts. The patient was given 30 grains of saloquinine in one dose, and directed to take 15 grains three hours after this, to be repeated every hour, thus receiving 180 grains of the drug from 6 o'clock P.M. August 19 to 5 A.M., August 20, when the last hourly dosis was taken. At 9 A.M. another 15 grains were given as a preventive and hereafter medication was withdrawn. On that day no paroxysm occurred, the patient passing a very good night and doing perfectly well during the twenty-first. That day he drank about 20 ounces of fresh milk and took 15 ounces of chicken broth at 4 P.M. The 15-grain powders were continued from the twenty-first, four powders every day for three days, and two powders per day during the twenty-fourth and twenty-fifth. The symptoms of nephritis had disappeared by the twenty-fourth and there had been no more paroxysms of the malarial fever since the twentieth. No plasmodia in the blood could be discovered since the twenty-first.

In this case the superiority of saloquinine can be easily demonstrated. Quinine, 24 grains, had had no effect at all, while 60 grains of saloquinine (the corresponding effective doses of the salts of quinine) must be assumed to have manifested a remarkable prophylactic power, since the paroxysm expected about eight hours after the last powder had been taken, did *not* occur. The same good prophylactic and curative effect must be attributed to the continued administration of the powders during and after the recidival paroxysms of quotidian fever, no other medication besides having been used, except the above mentioned stomachic. The nephritis was also influenced favorably, or at least the large quantities of saloquinine—a little over eight drams were taken within six days—failed to cause any irritation to the kidneys as the same amount of the usual quinine salts would certainly have done.

Case III.—Mrs. H. H., aged twenty-seven years, tall muscular, well-built brunette, had never suffered from any disease except troubles peculiar to her sex. She had had two miscarriages, three and two years ago. Her only child, a healthy boy, is four years old. Six weeks ago Mrs. H. had taken some kind of nostrum pills in order to cure an annoying amenorrhea of a few days' duration according to her statement. The consequences had been intense abdominal cramps and a menorrhagia which had lasted for nine days, with paroxysmal abdominal and pelvic pains, vomiting and diarrhea. Vomiting and occasional uterine and intestinal pains had persisted for almost three weeks. When I first saw the patient on July 19, the intestinal symptoms had subsided, while the miscarriage, suggested by the initial pelvic symptoms, was still incomplete, as I concluded from the pains described by the patient as labor pains which had started in 12 hours before. On examination I found a dark-colored apparently nonpurulent discharge and the cervix

uteri covered with a yellowish-brown membrane. The body of the womb presented the size, shape and consistence of a uterus pregnant about 10 weeks, being alternately in the state of contraction or soft and elastic. The patient accepted my advice to prepare herself for an eventual operation. She was admitted to the Emergency Hospital of Jersey City the same night, where we removed the remnants of the abortus under the usual precautions by means of placental forceps and curette. The patient made an uneventful recovery and was able to be taken home on the evening of the sixth day after the operation.

On July 26 she sustained an external injury about four inches below the naval and two and one-half inches to the left of the median line. According to her statement she also used a vaginal douche of doubtful character. On the evening of July 27 she was taken with a chill followed by a marked rise of temperature, remained in bed on the following day with much fever, severe headache, and felt as if she was going to die. I was called in on July 29, and asked Dr. R. W. Brayton of the Emergency Hospital to see the patient with me. When we arrived at the bedside at 5 P.M. we found the patient rather prostrated, her face sallow and sunken with a dull expression, a rapid pulse of 120, the temperature 105.2° F., the respiration 30. In the left lateral hypogastrium the skin showed a discoloration of the size of a pea, as from a contusion sustained a few days before. There was marked tenderness on pressure and crepitation on touch. No discharge from the vagina. On vaginal examination I found the cervix closed, the body of the uterus slightly swollen, the organ in dextroversion; an elastic tumor in the left parametrium. Diagnosis: Septicemia, metritis, parametritis of the left lateral ligament, peritonitis.

I at once gave 10 grains of calomel and a prolonged intra-uterine douche of two quarts of a three-per-cent. creolin solution. I ordered a large hot water enema to be given two hours later, cold sponging every two hours and ice bags on the forehead and abdomen. Brandy one tablespoonful was administered every half hour. For nourishment the patient received two ounces of coffee with a little milk every morning, clam broth or beef-tea five ounces, and the whites of four eggs, besides some iced milk during the day. During the first four days of my attendance the temperature did not rise beyond 105° F. in the evenings with morning remissions of 2.4 or 2.6° F.; the pulse averaged about 110, ranging between 100 and 115, and remaining of good quality. There were six evacuations of the bowels on the average within every 24 hours. Urine was passed spontaneously and quite freely without the use of a catheter. Besides the cold sponging and the ice I did not order any antipyretic measures until August 2 at 10 P.M., when the temperature ran up to 105.8° F. and the pulse to 130. The urine had been scanty and dark during the last 12 hours. Then I decided immediately on saloquinine and ordered 15 grain powders to be

given, one powder every hour. Besides I gave the patient 25 drops of the plain tincture of opium at 11 P.M. She was very restless during the night, tossing about a great deal, but slept for almost one hour after another 25 drops of the opium at 2 A.M. On August 3 at 11 A.M. the temperature was 101.3° F., the pulse 108. The catheter was now used and the patient passed 11 ounces of a dark, somewhat cloudy urine within 12 hours. There was some diarrhea and vomiting for the following three days, tympanites, and crepitation on touch could be demonstrated in the whole of the left lateral hypochondrium. On August 4 examination per vaginam showed the parametritis diffused through the whole pelvis and the uterus firmly impacted in the exudations. No fluctuation could be felt. The patient could not bear anything but peptonized milk and toast water. Brandy was stopped since it caused vomiting, and instead we gave her strychnine (one-thirtieth grain) hypodermically every four hours for the next 24 hours. Ice bags were continued. Under the use of saloquinine, 60 grains since 8 A.M., the temperature had not risen beyond 103° F. on August 3 at 7:30 P.M., and went down to 102° F. on August 4 at noon when the drug was stopped for 10 hours. Then the temperature rose again to 104.4° F. at 9 P.M. The pulse was 100, 106, and 100 respectively, regular and of good quality.

On August 5 at 1 A.M. I gave morphine one-half grain hypodermically which caused the patient to sleep for two hours. During the day she had sherry wine with beef, in the form of panopeptone, one tablespoonful every hour, as her only nourishment, since everything else was rejected by the stomach. The abdomen was much distended and the intestines tympanitic; the patient weak and distressed, cyanotic and comatose most of the time. The pulse was feeble, but regular, not falling below 100 nor exceeding 108, the temperature changing very little, from 103.6° F. at 1 A.M. to 102.6° F. at 9 A.M. and remaining at 103° from noon to midnight. At midnight one-thirtieth grain of strychnine; saloquinine 165 grains within the last 24 hours.

On August 6 the patient rallied, passed large quantities of a dark-colored but limpid urine and experienced much relief from the repeated passing of wind. At noon the temperature had fallen to 102° F. and did not rise beyond 104° F. at midnight. Total quantity of saloquinine given was 105 grains in 24 hours. The pulse was of better quality than the day before and did not exceed 110 at midnight. The vomiting had ceased entirely and the peptonized milk was accepted again, 12 ounces every four hours, the panopeptone being continued as before. The tenderness of the abdomen was less pronounced than before.

On August 7 at 11 A.M. an internal examination showed a rather hard, resistant tumor in the left lateral ligament; a more elastic tumor in the right parametrium. The symptom of crepitation had entirely disappeared. Temperature at 11 A.M. 101.2° F., pulse 100, of good quality.

In the afternoon arrangements were made to transfer the patient to a hospital. Since then I have lost track of the case.

In this special case the antipyretic influence of saloquinine on the temperature is quite conspicuous. On August 2 the temperature had risen to almost 106° F., and 12 hours later after 120 grains of the drug had been taken it went down 4.5° F., a longer remission than any within the four preceding days. The effect of the large doses persisted during the following 11 hours, as comparatively little saloquinine was given during that time; the temperature did not rise beyond 103° F. To make the antipyretic effect still more evident, the steady rise of the temperature during 22 hours on August 4, when only 30 grains were given during the first half of the day, is very interesting, and after 450 grains (about 30 grams) of the drug had been given within four days, up to 12 P.M. of August 6, the temperature 101.2° F. on August 7, took its lowest drop during the ten days of my attendance on the case. Also the tonic effect of saloquinine is evident, especially when we take notice of how low the patient was the day after the drug was withdrawn, how she began to improve after its reinstatement, and how the kidneys were stimulated through its action.

Case IV.—A. G., aged fifty-one years, laborer, of neurasthenic disposition, temperate, but poorly nourished and anemic, has suffered for the last year with hyperesthesia of the mucous membrane of the bowels, especially of the colon. When he called me on September 2, his wife informed me that he had had cramps of the same kind three times before during the last 12 months (one year ago I had seen him myself) and that they lasted as a rule from two to three days.

I found the patient in bed in the characteristic posture, the body being doubled forward, with his right hand pressing on the abdomen and complaining of intense abdominal pain. Pulse 78, rather tense; temperature 99° F., the patient having had three soft stools within the last three hours and having vomited three hours ago. There was no nausea when I saw him, the only complaint being the colic which had begun suddenly and was becoming unbearable during the last half hour. The pain was felt mostly in the left hypochondrium, radiating in the front to the hypogastrium and in the back to the left lumbar region. There was no tympanites. The urine proved on examination to be entirely free from any indication of disease. Its passage caused a slight burning sensation which had been annoying to the patient for several days. Diagnosis: Enteralgia.

Having tried saloquinine before in cases of neuralgia, I left five powders of 15 grains each to be taken every two hours, while the most acute pain was being relieved by pressure.

After having taken three powders he went to sleep and did not awake until the end of six hours, when he felt a desire to urinate. He got up and passed 20 ounces of urine with perfect

freedom and without the annoying sensation of the days before. He then took the two remaining powders, and when I saw him at noon was well and cheerful and without any complaint. He said that he had never before passed through an attack of cramps so easily.

Case V.—P. H., a business man, aged thirty years, neurasthenic, who had typhoid fever nine years ago and has been in relatively good health ever since. There was an indefinite history of attacks of malarial fever. He cannot bear any quinine, and I have observed on two occasions that one dose of 10 grains of a salt of quinine produced pronounced cinchonism. On September 5 at 9 P.M., I gave him 30 grains of saloquinine in one dose with a swallow of water, for no special ailment. The drug manifested its effect twelve hours later, after the patient had had a good night's rest. On the following morning he complained of a slight dizziness, informed that he had passed more urine than is usual with him and asked me if I had given him any quinine in his powder. There was not the slightest irritation of the stomach.

I mention this case for the information of those who might entertain the least doubt as to whether the quinine in saloquinine exerts any effect or not, and will add that in all the cases where I have given saloquinine (nine) there was never any objection to its taste; the drug, not being soluble on the tongue, has no taste at all.

From the clinical observations as reported above I should draw the following conclusions: The first two cases reported demonstrate beyond any doubt how well this new derivative of quinine can take the place of quinine in malarial fever, the larger doses being no objection on account of the non-irritating properties of saloquinine. In Case III, where in the course of the disease an acute gastritis develops, it seemed that the drug had even exerted a beneficial influence on the gastric innervation, vomiting being stopped when the use of the powder was resumed after an interruption of ten hours. The analgesic action is apparent from Cases IV and V. Cases III, IV, and V bear evidence of the remarkable influence which saloquinine has on diuresis.

MEDICAL PROGRESS.

MEDICINE.

Typhoid Gangrene.—This is a very rare complication of typhoid fever fortunately, and only a few cases have ever been noted, but its possibility should never be forgotten. C. E. NAMMACK (Med. Rec., Dec. 27, 1902) reports an extreme case in which both legs and thighs were rapidly involved up to the inguinal region, but the genital organs and the buttocks escaped. An autopsy was not allowed, but it was thought that the cause of the gangrene was an arterial thrombosis of autochthonous origin, involving the aorta at its bifurcation. The gangrene was at first dry in character and not accompanied with pain, but later became moist, and the distress necessitated the use of morphine. The dry gangrene began in the feet and spread upward to the

final line of demarcation. The change to the moist variety began above at this line and spread downward. Cultures from the blood were negative. This complication is more frequent during the second and third weeks of a typhoid. The cause of gangrene is an obstruction to the circulation, which depends upon four factors: (1) The altered blood, (2) the weakened heart, (3) the mechanical difficulties of the circulation in distant parts, and (4) the local effects of the bacillus itself. Four different varieties of obstruction may exist, and sometimes coexist: (a) Arterial thrombi of cardiac origin; (b) autochthonous thrombi in the arteries; or (c) in the veins, and (d) thrombi in the small peripheral vessels.

Dysphasia or Aphasia in Tuberculous Meningitis.

—This disease, as is well known, is characteristically protean in its onset. Its first indications may appear fulminantly in a strangeness or wildness of manner or in sudden impairments of memory or defects of speech. From this sudden type there are all gradations down to the slowest and most chronic form. M. MCINTYRE SINCLAIR of Glasgow (Brit. Med. Jour., Dec. 20, 1902) details an interesting case in which aphasia was an initial symptom of tuberculous meningitis. A most interesting characteristic of tuberculous aphasia seems to be that the patient becomes completely aphasic after indulging in a few minutes conversation, and the aphasia thus produced passes off in its turn after an interval of repose. This is similar to a case of Dr. Hinselwood under the name of "Dyslexia," in which his patient suddenly became word-blind after correctly reading a few lines of print. These conditions show an induction of rapid cerebral fatigue that might conceivably have been produced either by direct pressure of the tuberculous exudate on the nerve elements themselves or by an interference with the nutrient arterial supply. These conditions of phasic exhaustion are not fitly termed aphasia, but should be described as dysphasic. Gowers, indeed, has described a condition called "paroxysmal lameness," in which the patient becomes intermittently lame in the course of a walk. This is supposed to be due to some arterial degeneration in the cord or brain. The author would insist that the occurrence of aphasia or of dysphasia in a person already suffering from any form of tuberculous disease should be looked upon with grave suspicion and interpreted as indicative of meningeal involvement.

Atonic Gastric Insufficiency and Dilatation.—Of all the commoner forms of dyspepsia in women, and, indeed in some men, there is no doubt that this is the most frequent. ROBERT SAUNDY of the University of Birmingham (Brit. Med. Jour., Nov. 29, 1902), describes the method recommended for diagnosis of this condition by Dr. Eric Meinert of Dresden. This consists of 120 grains of sodium bicarbonate and 90 grains of tartaric acid, these quantities being dissolved separately and given successively. There is nothing new about the use of these two drugs, except the quantity which is at least quadruple the dose ordinarily advocated. It seems to the author a much more certain way than distending the stomach with air. The etiology of the condition he considers under the following heads: First, age. In males the disease seems rarely to begin before thirty, and although most common between that period and fifty it frequently persists throughout life. In women, on the other hand, it begins earlier and almost always ceases after fifty. The influence of marriage upon this condition affords little to comment upon, except that the number of single women is somewhat higher. This may, however, be explained by the fact that most of the author's cases belong to the middle class, in which the married women led compara-

tively easy lives, while many of the single women were clerks, etc., who suffered from overwork. In the past history of the patient, dyspepsia accounted for 42 per cent., neurasthenia for 29 per cent. Indeed only 10 per cent. can be looked upon as due to pyloric obstruction. In establishing a diagnosis, he does not look upon the stomach as dilated unless it reaches below the level of the umbilicus, only slightly dilated if to the level of the anterior superior spines. Markedly dilated below that line and half way to the pubes, while anything lower than this, he regards as "extreme dilatation." Based upon this classification he finds 15 per cent. were slight, 55 marked and 30 per cent. extreme, so that in 85 per cent. the great curvature reached far below the level of the anterior superior spines. Of the symptoms, pain was by far the most common, it being markedly present in 68 per cent. There seems to be no relation between the amount of pain and the degree of dilatation. It varies in position and in its relation to food, but it was most common in the epigastrium and after eating. Very rarely it was relieved by taking food. Vomiting, a factor which one would expect to be prominent, was insignificant in the author's series, being only 16 per cent., and curiously enough it is more common among men than women. The loss of weight was a prominent factor in 34 per cent., but although this symptom is of great importance, it is a difficult one to establish beyond peradventure, because very few women know what their normal weight is. It is, of course, more prominent in those cases of dilatation due to obstruction than to atony, because the former condition is so frequently malignant. Constipation and diarrhea were not so constant as the author had supposed. The first condition was present in about 20 per cent., while the latter was found in only about two or three per cent. Flatulence is extremely common, and there is no doubt that it was largely the cause of the pain. It may be due to fermentation and the formation of carbon dioxide, olefiant gas or marsh gas, but it is frequently present where there is no indication of unusually fermentative changes. Its presence in these cases must, therefore, be explained by the supposition that air is either directly swallowed or carried down with the bolus of food on account of lack of tone in the esophagus. The tongue was furred in only 15 per cent. of the cases, and this condition was more frequent among men. Other subsidiary symptoms were water brash, headache and anorexia. The chemistry of the dilated stomach shows free hydrochloric acid present in 60 per cent. of cases, absent in 40 per cent., in excess in 6 per cent. and deficient in 10 per cent. Peptic digestion was normal in 60 per cent., weak in 34 per cent. and absent in 12 per cent. Starch digestion was normal in 90 per cent., and in the remaining ten the erythroductine reaction was present. Lactic acid was present in 95 per cent. Sarcinae were present only in four per cent., one of which was a case of cancer. Torulae was slightly more frequent. The prognosis of these cases must be guarded. It improves with the youth of the patient and the history of an acute attack. But some of the most pronounced cases show an improvement under judicious treatment, which is truly astonishing. The author has found electricity to be of no use, and depends entirely upon a modified Weir-Mitchell course. At the end of six weeks of such treatment, there is usually a pronounced improvement, if not a cure, but in a proportion of the cases, the operation of gastro-enterostomy is so eminently rational and so free from danger that no careful observer can deprecate its value. Nevertheless this method of enforced rest for the paretic stomach often fails to give relief.

Rectal Feeding.—A series of interesting observations have lately been made on the value of rectal feed-

ing by D. L. EDSALL and C. W. MILLER (Univ. Penn. Med. Bull., Vol. XV, No. 11). Two patients afflicted with gastric ulcer, in whom rectal feeding was imperatively indicated, were given three nutritive enemas daily, consisting of 400 c.c. of milk and six eggs, with salt and predigested by pancreatin. The nitrogen and fat of the food and then of the urine and feces were carefully estimated. It was found that the amounts absorbed were far less than the demands of the patients, and the condition of the urinary nitrogen demonstrated that the tissues were suffering. About 40 per cent. of nitrogenous food and 30 per cent. of fat were absorbed. The water in the enema probably contributes the favorable item. The fact that patients may occasionally be kept nourished in this way is probably due to the previous gradual reduction of the food intake, and therefore a gradual reduction in their metabolic demands. Enough food may thus be provided to prevent tissue loss, but this merely amounts to keeping the patient from losing ground when he is already in a condition of decided subnutrition. Usually the imperfect absorption of food administered per rectum supplies only a very small part of the amount of nourishment necessary in order to maintain a nutritive equilibrium.

Tracheoscopy and Bronchoscopy.—A description of the tubes devised by Killian, for the direct examination and treatment of the trachea and bronchi is contributed by E. J. MOURE (Jour. de Méd. de Bordeaux, Dec. 14, 1902). These are rigid tubes constructed much on the lines of the oral speculum, but of greater length, and in sizes varying with the age of the patient, and provided with a straight branch at the top at a right angle to the tube, by which it may be held by the operator; the light being thrown into the tube by a specially devised illuminating apparatus. The tube may be introduced through the tracheal orifice of a patient previously subjected to tracheotomy, or through the larynx; the epiglottis and base of the tongue being strongly depressed, and the head inclined backward. In the latter method, the patient is placed in a horizontal position and usually chloroformed; the operator taking his position back of the patient's head. This method of exploration may be utilized not only in the diagnosis of morbid conditions, but also for the local treatment of circumscribed tuberculous and syphilitic lesions, and for the removal of benign tumors. The extraction of foreign bodies is also facilitated by this means, a hook of greater length than the tube being used for the purpose. If the condition of the mucosa be masked by the secretions, these may be removed with swabs or, if excessive, by an aspirating pump devised by Killian.

Some Questions Relating to Acetone.—The influence of fats upon the elimination of acetone has been carefully studied in ten diabetics by G. SATTA (Rif. Med., Dec. 22, 1902), who finds that in mild cases, acetone-production is very slightly increased by ingestion of fats; but in severe cases the effect is very marked; an increased elimination of acetone to the amount of 1 gm. being seen, if but 12 to 15 gm. of butter be taken. Beta oxybutyric acid was also increased by butter in both mild and severe cases; the increase being most striking in severe cases. The increase in elimination of acetone induced by other fats, such as olive oil, beef fat, etc., was from one-fourth to one-third less than when butter was used.

A New Method of Percussion of the Spleen in Infants.—The usual methods having been found unsatisfactory by F. SARCINELLI (Rif. Med., Dec. 20, 1902), he has devised a method of percussion which he finds especially well adapted to the examination of the spleen in infants; he thus describes it: An assistant holds the patient up in a horizontal position half

way between the dorsal and left lateral decubitus, supporting the child with one arm beneath the left shoulder, and the other, beneath the pelvis. The operator then percusses the organ from below. A larger area of the spleen is said to be available for percussion in this position than in any other, and the organ falling by gravity to the posterior costo-abdominal parietes, is thus carried away from the stomach; this being particularly advantageous, as the infant stomach is so frequently distended with gas that it is apt to mask the percussion-note of an enlarged spleen.

Thoracic Compression as a Means of Diagnosis.—

The presence of pain, even though slight or referred to some point other than the chest, is utilized by G. MORENO DE LA TORRE (Rev. Med. Cubana, Dec. 1, 1902) in the diagnosis of pneumonia, in which the physical signs and general symptoms are obscure; as in chronic pulmonary affections such as emphysema, in women with very large breasts, in children and old people, etc. By compressing one side of the chest with both hands, so that the lung is immobilized, the pain will subside or greatly decrease if due to inflammation in the lung so immobilized. If the opposite lung be responsible for the pain, it will continue, though its character may be modified or locality changed. Thus by alternate compression of both sides it may be determined which lung is inflamed. Similarly, if the pain be referred to the abdomen, its cessation on compression of the chest points to thoracic inflammation; its continuance or increased severity, to abdominal trouble.

The Malignancy of Joint Tuberculosis.—That the so-called healed tuberculosis bone lesion is a constant menace to its possessor is the conclusion arrived at by C. F. PAINTER (Bost. Med. and Surg. Jour., Jan. 8, 1902) from a study of 47 cases of recurrent illness. The average duration of quiescence in 45 cases was 12½ years. The average age at time of exacerbation was twenty-eight years. The recurrence of the tuberculous process is most commonly a local one; metastases are rare. Trauma, direct or indirect, is frequently associated with the recurrence. Indirect trauma is probably the exciting cause of most recurrences, especially where partial ankylosis or deformity exists. Patients who have suffered from bone and joint tuberculosis should be cautioned that they are not well when symptoms have ceased, and that reasonable care must be exercised if it is desired to avoid a recurrence of the disease. The chance of recrudescence is lessened by correcting the deformity as far as possible. In the acute cases, in childhood, mechanical fixation should be used. Exploratory interference, however, with a view to removing isolated foci, is advisable in many cases in children, and in a majority of recrudescences, if seen early, exploration may be wisely urged. It is important to recognize the fact that patients with hip disease, Pott's disease and tumor albus have tuberculosis and should be treated accordingly. Painter classifies tuberculous tumors of the joints as malignant, not on morphological grounds, but because of their tendency to recur after removal. In his series of cases 38 recurrences were at the seat of the old disease only. Five were local and metastatic and only four were purely metastatic.

Congenital Dislocation of the Small Intestine.—A female infant, eleven months old, was brought to J. N. HALL (Arch. of Ped., Jan., 1903) with an enormously distended abdomen, but with no other signs of rickets, syphilis or other disease, and no enlarged lymph nodes. The child was breast-fed, took its food well, and weighed over eleven pounds. No normal spontaneous stool had ever occurred, but with laxatives, enemas, electric stimulation of the bowels, etc., the child passed quite normal feces every one or two days. The abdo-

men slowly enlarged, until great distress followed if a day passed without stool. The temperature was 100° F., pulse 120, tongue clean, and the abdomen enormously distended; and the child died the day after it was brought to the author. A post-mortem limited to the abdomen revealed a normal colon, and all the other organs normal except a slight enlargement of the mesenteric lymph nodes and the enormous small intestine. The first two inches were about two-fifths of an inch in diameter, about normal, but it then dilated quite suddenly to a diameter of 1¼ inches, the dilatation extending to two inches from the cecum. The contents were apparently normal yellowish semi-liquid feces. The author believes that death resulted from auto-intoxication. An interesting fact was that an uncle had been similarly affected in early childhood, but had slowly improved. His bowels now need constant attention to avoid complete obstipation.

Mouth Washes.—As poor digestion and other troubles may result from insufficient care of the teeth and mouth, W. H. TRICK (Dublin Jour. of Med. Sci., Dec., 1902) enumerates the essentials of a good mouth-wash. It must be non-poisonous, non-irritating, deodorizing, antiseptic and refreshing. It must also be neutral in reaction, alkalies attacking the organic constituents of the teeth, and acids disintegrating the mineral constituents. It is, of course, not necessary to destroy all the micro-organisms of the mouth, a result that could be gained only by very powerful substances, but fermentation and decomposition should be arrested. Of substances which have been found to be injurious to the teeth, are weak solutions of corrosive sublimate, cream of tartar, salicylic acid, alum, boric acid, thymol and carbolic acid.

Inoculation for Typhoid Fever.—Human blood serum can agglutinate and kill a certain number of typhoid bacilli, but, after having destroyed its full complement, it is harmless to other typhoid germs. The "Berne serum," which was put on the market for the treatment of typhoid, increased the agglutinating power of the blood but destroyed its bactericidal power, and so was worse than useless. Typhoid bacilli in the blood are caught in the meshes of the spleen, and being bathed in blood serum are soon killed, but there are limited areas of the spleen where the bactericidal substances of the serum seem to have already been destroyed, and here the bacteria multiply, the spleen becoming enlarged and congested. Blood from such a typhoid area of the spleen is incapable of harming the typhoid germ, while that from a finger of the same patient is still bactericidal, this indicating a prompt destruction of the anti-bacterial body in the neighborhood of the splenic typhoid colonies. Now, by the toxin formation of the typhoid colonies, the normal anti-bacterial power of the blood is lowered and some living bacteria may travel through the blood to other parts and form colonies as in the rose spots or the miliary colonies found in the small intestine. Soon, however, the stimulation of the toxins results in an increase considerably above normal of the bactericidal and agglutinating substances of the blood, as demonstrated by the appearance of the Widal reaction when the disease is well established. The prognosis then depends on the ability of these substances to overcome the toxins and bacteria. If, now, the response of the body is just insufficient, a little aid in the shape of a stimulating "anti" serum may turn the balance in favor of the body as against the germ. With the British Army in South Africa, Lieut. W. C. STEVENSON (Dublin Jour. of Med. Sci., Dec., 1902) employed a broth culture sterilized at 60° C. It was found that a dose of one c.c. was followed by a lessening of the body-resistance, and that it took two or three weeks

before the body showed increased bactericidal power. This long non-resistant period was too dangerous, so very small initial doses were given, and resulted in an increased bactericidal power in a single day. If, now, after ten days a larger dose is administered, a still greater bactericidal power is gained. The symptoms from inoculation are trivial, rarely resulting in more than a stiffness of the muscles near the site of the injection. In the army the percentage of typhoid cases among those so treated was very considerably less than among those not treated, but all were equally exposed, though inoculation does not absolutely prevent the disease. It must never be forgotten that too large an initial dose is followed by a short period of lowered resistance and would be dangerous in the presence of an epidemic.

Washing of the Stomach.—Those who have had opportunity to wash out the stomach very frequently, have often been dissatisfied with the amount of return fluid which, ordinarily, cannot be increased, however hard one may try to do so. C. MECK (*C'blatt f. Chir.*, Dec. 27, 1902) has hit upon the following simple plan, the efficacy of which he has tested a great number of times in the cadaver and living subject alike. After the fluid is run into the stomach, and the operator is ready to lower the funnel, instead of maintaining the patient in the horizontal position, he elevates the hips high, in this manner bringing the fluid toward the esophageal end of the stomach, and therefore toward the mouth of the tube as it lies in the organ. This maneuver he has found to empty the stomach entirely in the cadaver, even when repeated efforts in the horizontal position have failed to remove any more of the fluid. Similarly, in the living, he has frequently observed that when the return stops in the horizontal position, it will be resumed so soon as the hips are sufficiently high. The maneuver is easy of accomplishment, and not especially difficult for the patient.

NEUROLOGY AND PSYCHIATRY.

Tabetic Joint Diseases.—The study of neuropathic joint affections was grounded by Charcot in 1868, since which time the French have done the greater part of the work in these investigations. K. WILDE (*Deut. Zeitsch. f. Chir.*, Oct., 1902) in an exhaustive article relates the ancient as well as the most modern views of the etiology of this interesting and not uncommon affliction. Charcot's view, as is well known, was that the tabetic joint is the result of degeneration of the trophic centers in the anterior cornu of the spinal cord. Later on, however, this view was shown to be groundless by microscopic investigations so that Charcot himself retracted it. In a somewhat modified form it has very recently been brought back to life by Gilbert who assumes a trophic center in the spinal cord which has control of bone building. Charcot later altered his opinion, concluding that the condition was dependent upon tropho-neurotic changes in the terminal nerve elements of the bone. Although to this day the evidence of such terminals has not been shown, the great probability of the truth of his theory still holds good. Buzzard's belief that there was a center for joints in the medulla oblongata was used by him to explain the frequent occurrence of gastric crisis, because of the proximity of the two centers, has only historic interest. Volkmann believed formerly that tabetic arthropathy held some very distinct relation to arthritis deformans and tried to explain the condition on a purely mechanical basis. This view is shown to be fallacious because the greater part of tabetics do not suffer from broken down joints. Virchow, Rotter and others hold that the affection is similar to an arthritis deformans,

which assumes a peculiarly rapid and destructive course because of the injury to the nerves. Clinically, however, both these sicknesses, as has frequently been shown, are utterly different from each other. To be sure the hypertrophic form of tabetic joints may resemble the joint of arthritis deformans, particularly in the mono-articular form, but the bone changes, if carefully studied, present conclusive differences. The atrophic form shows itself by the fulminating speed of bone destruction and by the rapid establishment of flail-joints. In arthritis deformans, on the other hand, the atrophy is never of this advanced character and the destruction is always accompanied by osteophytic action. In this way, by careful observation, we can easily distinguish tabetic joints both pathologically and clinically from arthritis deformans. Strümpell's view that the bulk of arthropetic joints are of syphilitic origin is also untenable. We see in the course of other spinal cord diseases, for instance syringomyelia injuries, and so on, almost identical joint lesions as in tabes, where lues can be positively excluded. In many of the author's cases even congenital syphilis could be positively excluded. He is forced to the conclusion that some other factor or factors than those considered were instrumental in creating the diseased joints which he reported. A very careful investigation into the history of all these cases revealed the fact that every one if questioned closely could not deny injury of greater or less moment in the very early stages of the trouble. He would therefore speak of traumatic tabes. It seems to him worthy of note that if a patient in the very earliest and usually unrecognized stages of tabes suffers either from a sprain or a subluxation or a dislocation or a joint fracture, it is reasonable to assume that the groundwork for the characteristic destruction of the joint was already present in the constitutional disease and all that is necessary is a slight traumatism just as we often find in children of a tuberculous diathesis that an insignificant fall or a slight twist will be the starting point for typical tuberculous infection. There are thousands of tabetics who year in and year out carry on their accustomed work without suffering any inconvenience save from their incoordination. Let one of them, however, receive ever so slight an injury in his weakened joint anatomy and the characteristic Charcot joint receives the very impetus which allows it to develop.

Observations on Cerebral Localization.—In matters pertaining to the morphology and function of the head, the Italians are at least as active as any other nation. FRANCESCO DURANTE, Director of the Surgical Clinic, University of Rome (*Brit. Med. Jour.*, Dec. 13, 1902), contributed some interesting observations bearing more particularly on the importance of the frontal lobes as the seat of the higher functions of mind. He believes that the surgeon can contribute more successfully than the physiologist, because the latter is obliged to draw his conclusions from the dissimilar brains of animals, while the former is frequently given an opportunity to operate upon the human brain. He rehearses the history of eight cranial resections, six for dural and cerebral neoplasms and two for remote and post-traumatic conditions with eight cures, of which five are complete and three with defect. Of these eight cases one died from recurrence after the second operation. His conclusions were as follows: (1) That lesions, especially those determined by neoplasms of the frontal lobes, are nearly always accompanied by a very grave phenomena of altered intelligence, which proves that the frontal lobes and particularly the prefrontal, must be considered as the seat of the most elevated functions of the mind; (2) that the cortical center for

hearing is situated in the temporal lobe, that each center is in relation with both the auditory nerves, and that the direct auditory bundle must be very much less active and smaller than the crossed auditory bundle; (3) that the site of the center for general sensibility and for muscular sense is in the parietal lobes and that disturbances of general sensibility and of muscular sense may occur in the limbs independently of any disturbance of motility whatsoever; (4) that for the solution of various problems concerning the functions of the several regions of the human brain, operative surgery and pathological anatomy are more useful than experimental physiology, which has animals only at its disposal; the functional arrangements of the brains of such animals has some analogy to that of man but certainly cannot be compared with it in every respect.

Massage of the Neck for Insomnia.—All direct and side-lights upon that most vexatious of single symptoms, insomnia, are certainly very welcome, and the application of the following very simple methods may, in selected cases, be worthy of trial. A. G. NEUMANN (La Sem. Méd., Dec. 17, 1902) has been having success by massage of the neck for various degrees of insomnia. The patient lies down upon his back, with the head slightly supported in the forward position. The masseur sits at his side and carried out light, rapid motions, especially along the region of the muscles of the neck. In passing from above downward, beginning, for example, at the ear, he passes down to the root of the neck, to the so-called jugular fossa. At first it is necessary to continue the massage for one-half hour, gradually, as a rule decreasing the time to 15 or 12 minutes or a little less. This method of treatment appears to be most efficacious against those forms of insomnia which were due to hyperemia of the brain, for example, in neurasthenia, alcoholism, nephritis and other conditions among consumptives. He has similarly succeeded with anemia and chlorosis. He goes so far as to state that he has found this method successful when narcotics, even of the more powerful type, utterly failed.

Serotherapy in Mental Diseases.—In discussing the employment of serotherapy as applied to mental affections TAMBRONI (Rev. di Freniatria, Vol. XXVIII, fasc. 1) draws the following conclusions: Specific serotherapy is so far only a desideratum in psychiatry. Physiological serotherapy is easily applicable in the insane and requires the simplest technic. It is to be employed in cases in which the mental affection can be ascribed to either infection or auto-intoxication; but still so far it is impossible to state with any degree of certainty that physiological serotherapy exerts any useful, constant or direct effect on the mental condition present. It may, however, like many other equally useful therapeutic agents, be of marked benefit to the gastro-intestinal tract, or the general physical state of such insane as suffer from dementia, epilepsy, pellagrosis, etc.

Anatomical and Histological Changes of the Nervous System in Parkinson's Disease.—The communication which was presented by BURZIO (Ann. di Freniatria, Vol. XII, fasc. 2) before the Italian Freniatric Society, is based on two cases, both of which came eventually to the anatomical table after a slow progressive marasmus. The first case showed atrophy and extreme fragility of the cranial bones, vertebrae and ribs. The dura was thickened and adherent to the cranium; the brain was markedly congested. The spinal cord showed advanced atrophy of the posterior columns, especially in the whole length of Burdach's column. Histologically there was atrophy at times passing into sclerosis, accompanied by the almost com-

plete disappearance of the sheaths. Certain special preparations brought out abnormal pigmentation of the cells of the anterior horns, the presence of very numerous amyloid bodies and occlusion of the central canal. The second case showed a slight diffuse leptomeningitis with a certain degree of cerebral edema, the arachnoid full of irregular hard parchment-like plaques corresponding to the posterior dorsal region. There was observed in the intervertebral ganglia an hypertrophy of the interstitial tissue with an increase in the number of the nuclei and atrophy of the cells. The cortex of the frontal and parietal convolutions showed atrophy and refraction of the medullated fibers. Although the communication is but preliminary to a larger one promised by the author at some future time it goes far to substantiate the author's contention as to the existence of an anatomical basis for Parkinson's disease.

Frequency of Kernig's Sign.—Inability to passively extend the knee fully, while the thigh is at right angles to the body was present in over 60 per cent. of all hospital patients examined by R. D. RUDOLF (Am. Med., Nov. 8, 1902). Kernig's method is to place the patient in a sitting posture and then extend the knee. A more convenient way of applying the same test is that mentioned by Osler, in which the patient is kept recumbent and the thigh is placed at right angles to the body and then the knee is extended. A procedure having advantages over both these methods is first to extend the knee fully, then flex the thigh on the pelvis and measure the angle at the hip. Thus only one angle requires to be gauged instead of two and hyperextension of the hip, showing muscular hypotonus, can be measured. There is a great proneness in meningitis to increased muscular tonus, which is most apparent in the muscles of the neck and in the hamstrings. This hypertonus is probably due to cerebellar irritation, and, conversely, cerebellar irritation is probably the explanation of Kernig's sign in meningitis. Inability to extend the knee fully with the hip at right angles to the body, or to flex the hip to a right angle while the knee is extended, occurs in many conditions besides meningitis. They are cerebellar diseases and diseases of the upper neurons of the motor tracts, acute eye troubles, disuse of the lower limbs for some days, as in recumbency, local conditions in these limbs as sciatica, arthritis and contractures, old age, etc. When Kernig's sign is well developed in a recently healthy individual who has fever and none of the conditions mentioned, then it is a valuable sign of meningitis, and this is probably, at least partially, in the cerebellar region. For the purposes of greater clinical accuracy, it is urged that writers upon this condition, express the angle at the knee or hip in degrees, rather than merely mentioning the presence or absence of the sign.

Collapse in Acute Infectious Diseases.—Circulatory disturbances occurring in patients suffering from some febrile disorder, have always been attributed to heart failure, as a result of the infection. The article of D. PASSLER and D. ROLLY (Münch. med. Woch., Oct. 21, 1902) however, throws new light upon this subject. Numerous experiments on animals with various toxins show that the collapse is really due to a paralysis of the vasomotor system. The heart itself does not contribute to the fall of blood-pressure and may even compensate for this by increased work. The poison of diphtheria alone directly influences the heart, which corresponds with the fatty degeneration found postmortem, while this materially diminishes the powers of resistance of the heart, the prime cause of circulatory failure, even in diphtheria, is vasomotor paralysis.

THE MEDICAL NEWS.

A WEEKLY JOURNAL
OF MEDICAL SCIENCE.

COMMUNICATIONS in the form of Scientific Articles, Clinical Memoranda, Correspondence or News Items of interest to the profession are invited from all parts of the world. Reprints to the number of 50 of original articles contributed exclusively to the *MEDICAL NEWS* will be furnished without charge if the request therefor accompanies the manuscript. When necessary to elucidate the text illustrations will be engraved from drawings or photographs furnished by the author. Manuscript should be typewritten.

SMITH ELY JELLIFFE, A.M., M.D., Ph.D., Editor,
No. 111 FIFTH AVENUE, NEW YORK.

Subscription Price, including postage in U. S. and Canada.

PER ANNUM IN ADVANCE	\$4.00
SINGLE COPIES10
WITH THE AMERICAN JOURNAL OF THE MEDICAL SCIENCES, PER ANNUM	8.00

Subscriptions may begin at any date. The safest mode of remittance is by bank check or postal money order, drawn to the order of the undersigned. When neither is accessible, remittances may be made, at the risk of the publishers, by forwarding in registered letters.

LEA BROTHERS & CO.,

No. 111 FIFTH AVENUE (corner of 18th St.), NEW YORK.

SATURDAY, FEBRUARY 7, 1903.

PRACTICAL ASPECTS OF ARTERIOSCLEROSIS.

THE symposium on arteriosclerosis at the recent meeting of the Medical Society of the State of New York, for an account of which see the society proceedings in this issue of the *MEDICAL NEWS*, page 274, brought out a number of very practical points with regard to this important affection. While atheroma, the localized degeneration of arteries, has been recognized for centuries, its clinical significance has come to be realized only in comparatively recent years. It is scarcely more than a single generation of medical men since Gull and Sutton called attention to the generalized sclerotic condition, liable to affect even small arteries or capillaries, and producing the so-called arteriocapillary fibrosis. The clinical position of the affection has gradually become more prominent until now it furnishes material for a long symposium, every detail of which was of practical rather than theoretical interest.

While arterial degeneration may be considered almost normal in old age, and to some slight degree at least, is usually present in every individual after forty-five years of age, it is by no means confined to the second half of life. A number of recently reported cases involve even quite young persons. Localized degeneration of arteries, usually in the abdomen, has been found in young

children. In hereditary syphilis, there are often manifestations due to arterial degeneration that affect adolescents between the years of fifteen and twenty-five. Dr. DeLancey Rochester reported three cases between the ages of twenty-nine and thirty-two. In such cases heredity is usually a prominent factor, and it would seem that so far as long life and short life are family traits, their basis is to be found in a hereditary condition of arteries that makes them naturally more or less vitally resistant to disease and to the wear and tear of existence.

There is no doubt now that arterial degeneration may affect one part of the body without there necessarily being any change in the vascular system of other parts. The mere negative examination of the radial artery, is not enough to exclude the presence of arterial change all over the body. On the other hand a radial artery with what Dr. Glentworth Butler so picturesquely describes as the characteristic goose-neck feel, hard, elongated, and tortuous, does not necessarily imply an immediate unfavorable prognosis, unless there is reason to think that the arteries of important internal organs, and especially of the central nervous system, are similarly affected. The premature degeneration of a single artery, as for instance the Sylvian, may be the only manifestation of arteriosclerosis. This not infrequently leads to apoplexy under fifty and has been recognized as a family trait in some families, the successive generations of which, are taken off by a stroke toward the end or just after the completion of the fifth decade of life. Professor Curschmann's rule then to examine all the palpable arteries and not to confine the examination to one side of the body is a good one, and must constantly be borne in mind. At times the vascular system on one side may be much more effective than on the other, as any one who has the custom of examining both radial arteries will readily remember.

The most prominent feature of the discussion at Albany was the practically unanimous agreement that in elderly persons so-called gastric colic, or gastralgia, is often not really a genuine gastric disturbance, but is a disguised form of angina pectoris. These pains occur not infrequently shortly after the ingestion of food, and especially unsuitable food. The heart action is usually assumed to be disturbed, by the gastric irritation, by consequent reflexes along the vagus, and by mechanical interference from dilatation of the stomach. There are very few practising physicians of considerable experience, however, who

have not had unexpected cases of sudden death in such patients. Until Boards of Health refused to accept the phrase, the favorite entry in the death certificate, as the direct cause of death in these cases was "heart failure." The scientific theory advanced to account for it was that intense irritative reflexes, flowed over from the gastric filaments of the vagus into the inhibitory fibers of this important nerve and stopped the heart's action. The day of the reflex may not have entirely passed, but it is surely passing, and the newer explanation offered of the fatal termination in these cases that the affection is primarily a heart condition due to degenerative changes in the heart itself and its arteries is much more satisfactory.

For the diagnosis of arteriosclerosis of peripheral arteries the excellent device of obliterating the pulse by a finger just above while another finger rolls the artery, remains the most trustworthy. An excellent bit of accessory diagnostic technic, however, is to place the forefinger lengthwise over an artery and then by gentle pressure note its inequalities and the way in which the pulse wave travels in it. There is a characteristic inequality of the wave in thickened arteries, due to the fact that sclerotic changes in arteries are not uniform, but are irregularly distributed.

With regard to the treatment of arteriosclerosis the most important element is to secure absence of care and worry, and the avoidance of all excesses not only in eating and drinking, but also in work. Outdoor air, in an equable climate, and a quiet existence are the only things that favor prolongation of life once distinct evidences of arteriosclerosis are noticed. The physician must insist on this if he would consult the best interests of his patients.

THE IMPORTANCE OF BLOOD-PRESSURE.

HAVING at last a theory of collapse and shock which is satisfactory to physiology (thanks to Dr. G. W. Crile of Cleveland), it may be well to have recalled to mind the importance of attention to blood-pressure, now proven to be the basis of both these alarming conditions. Dr. Harvey Cushing of Baltimore did this exceedingly well for the profession last week at the Boston Medical Library. The surgical physiologists have been accomplishing so much of late (with the aid of animal experimentation), that physicians are apt to notice much less than it deserves this far-reaching suggestion introducing into the clinical routine a new procedure and adapting for its use a valuable instrument of precision itself only

three or four years old. We refer to the regular observation and recording of blood-pressure as readily obtainable with the modified Riva-Rocci sphygmomanometer. This instrument consists of a flat rubber bag about four centimeters wide and long enough to encircle the arm; this bag is enclosed in a canvas covering bearing longitudinally a row of hooks by which it may be adapted and fastened to any arm, small or large. This is connected by a small but heavy rubber tubing with a straight mercury manometer, often made, for greater portability, in two parts, and to this is connected an ordinary double bulb such as is used with the cautery. If now the armlet be fastened snugly upon the arm above the elbow and the pressure be gradually raised by repeated compression of the bulb, the elastic bag will evenly constrict the arm and its contained brachial artery, the manometer recording the pressure. If with the fingers of the right hand we now feel the radial pulse while with the other hand we compress the bulb, as the pressure rises we will note the instant when the pulse is lost; then lowering the pressure the pulse suddenly returns and the pressure at which it does so is the systolic blood-pressure. This instrument may be left on the arm indefinitely without inconvenience and is almost instantly ready for an observation.

Dr Cushing has emphasized in convincing terms the strong need of having continuous record of the blood-pressure such as is now made universally of the temperature, pulse-rate, and the rest. To the physiologist indeed the blood-pressure seems the most practically important of these all, possibly excepting temperature; it is certainly of much greater moment in most cases than is the pulse-rate, for these reasons if for no other. The heart is by its nature a most powerful and persistent organ and eminently automatic. It is adapted to very great variation in the speed at which it works in order to adjust it to widely varying systemic conditions, a fact explained by the seldom-realized circumstance that this viscus actually rests on an average eighteen hours out of the twenty-four; it has then constantly in store a large supply of latent energy. It is far otherwise with the pressure of the blood as regards the intimacy of its relation to tissue-life; indeed the heart is a mere pump whose sole purpose it is to supply the capillaries with an adequate amount of blood at a pressure necessary for its interchange with the cells of the tissues. The osmosis and filtration of the nutritive elements is largely dependent on the accustomed pressure in the capillaries and in the spaces around them,

and to change it, especially to lower it, is to vitally disturb this the most basal of organic functions, nutrition. In collapse this vital blood-pressure is low from any one or more of many possible causes. In shock the blood-pressure is low because, as Crile has shown, the vasomotor center in the medulla oblongata, which normally maintains the blood's pressure by changes in arterial tone, is exhausted and quite incapable of its life-preserving task. Thus collapse is a dangerous condition because a very low blood-pressure prevents the indispensable interchange between the tissues and the capillaries; shock is dangerous for the same reason, but much more dangerous because of the temporary death of a vital center in the brain.

Now these conditions of collapse and shock, as represented by low and ever-falling blood-pressure, are not adequately discernible in practice by the average physician or surgeon with his finger on the radial or carotid, and even the *tactus eruditissimus* of the expert fails to convey scarce more than the mere direction of the change in arterial tension; for nurses or orderlies to keep informed as to blood-pressure without mechanical apparatus of course is out of the question. The conduct of many of the severe infectious fevers and of other conditions in which collapse is to be feared suggests powerfully the benefit which might come from a continuous record of the varying pressure, as, e.g., on a chart like those on which now the temperature and pulse-rate are so regularly recorded. Finally, for the surgeon to have before him as he performs a long and severe operation a plotted curve showing every five minutes the pressure in the arteries, is for him to have early warning indubitable of what often he fears most, the beginning of shock, and therein too the one record which tells him most that is essential of the condition of his patient. With this knowledge the surgeon acquires great advantage over the case and a latitude in operating heretofore unknown, for he has information which is scientifically exact.

Here then in this continued work of Crile, Dawbarn, Cushing, Janeway, Cabot, McCurdy, Hough, and others the profession finds taken a step distinctly in advance toward the precision of the arts of medicine and surgery, one more lessening of the old reproach that medicine as a whole is largely an empirical science, a matter of guess-work more than of measurement. Experimental physiology is changing all that to the lasting benefit of humanity and her brute friends.

PARAFFIN IN SURGERY.

IN May, 1899, Gersuny of Vienna first conceived the idea of using this substance. It was in a man who had undergone the removal of both testicles for tuberculous disease and who desired to pass the examination for the army. Gersuny had observed that hard vaseline, melted and injected under the skin remained there unchanged, and he concluded that by using paraffin he could produce in the scrotum the appearance of testicles. This was accomplished in so practical a manner that the man passed the physical examination for the army. A year later the lumps of paraffin were unchanged and as hard as cartilage. Some months after, however, the patient had typhoid fever and his temperature rose above the melting point of paraffin, 104° F., when the testicles softened and ran together, but a year later they had regained their normal shape.

Gersuny's next case was one in which operation for cleft palate had been done, but the palate was too short to reach the back of the pharynx and after much difficulty he succeeded in enlarging it by paraffin injection. In 1900 he published his cases with the following suggestions, viz.: that paraffin be used to raise the cheek, after excision of the superior maxilla; to fill a cavity in bone after operation for necrosis; to make good a morphological defect in the brain; to obtain a movable joint after resection; to support the weight of the blood in varicose veins; to cure incontinence of feces or urine; to keep back a hernia that could not be held with a truss; to conceal the flatness of the chest wall after removal of the breast. One of his own cases was that of successful cure of incontinence of urine in a woman who had undergone seven operations for vesico-vaginal fistula, all of them in vain.

Is this method attended by serious danger? Probably not if certain restrictions are cast about its employment. There is no fear of poisoning. There is no risk of suppuration or of sloughing if, first, the solution be sterile, and second, too much be not injected at once. The danger from embolism is not great, considering the number of cases in which it has now been used. In the whole of the literature but three cases are recorded and in at least one of these the mass of paraffin used was vastly in excess of what is now deemed safe. Certainly this danger is not greater than one per cent. in cases where the injection is made in the loose tissue around the vagina or rectum, and practically nil when used beneath a depressed scar or for a deformed nose.

The question of the melting point of the mass is not as yet definitely determined, but Stephen Paget regards a composite paraffin having a melting point between 111° F. and 115° F. as the most satisfactory. Especially in nose work one needs a paraffin that sets rapidly and firmly to withstand the very heavy pressure of the skin. One has to balance between a paraffin that may be a little too soft and one that may be a little too hot. Another problem, which is scarcely second to those already considered, is the shrinkage of the paraffin. The harder it is the more it shrinks.

So far as the technic of the operation goes, asepsis is as important here as anywhere. Two syringes should be prepared in case one gets out of commission. They are kept in a water bath several degrees above the paraffin melting point. A general anesthetic is given. The skin is nitched for the needle and five or six c.cm. of the paraffin taken into the syringe. Then the needle is dipped for a moment into boiling water. It should not be passed through a flame, because this burns the paraffin and stains it. An assistant keeps a very firm pressure about the nose, or part undergoing operation, making his fingers and thumbs meet in a ring. Injection should be at the rate of about one c.cm. in ten seconds. The paraffin begins to set in less than a minute, but it is plastic for a quarter of an hour. The molding should be done very vigorously and the nose must not be left until the paraffin is hard. A cold compress should be put over the face after the patient is put to bed.

As far as general results go, they are excellent. The surgeon must not promise a pure Greek profile to any patient, but he can justly assure them of very great improvement. Stephen Paget has had 26 cases without death or disaster. The noses are not perfect but they are sufficiently elegant to make the people happy, to enable them to get work or get married, and to go about without being suspected of having had syphilis.

THE HERALD ON HEALTH DEPARTMENT APPROPRIATIONS.

In the editorial columns of the *New York Herald* of January 19, an article remonstrating against the raising of the assessed valuation of real property, expresses fear lest it may lead to municipal extravagance, and mentions as an example of this extravagance, that "the Health Department grows daily more expensive through the new-fangled additions of nurses and eye doctors imposed upon the schools." Whatever the worthiness of the remainder of the criticisms

of the city's government, they must be robbed of their influence by the embodiment of such a sentiment. A remark which pronounces any advance made in the city's protection of its citizens, and especially of its children, as too "new-fangled" and extravagant, will not only fail to gain the public's approval, but must bring distrust of any other remarks from that source. It has taken a fight of fifteen years to have means secured for the protection of the pupils of our public schools from that dangerous and most contagious of diseases of the eye: trachoma. Even the exhibition before the legislature, several years ago, of children rendered blind by the ravages of this disease, failed to move that body to action. Last spring the examination of the pupils of only thirty-six schools, showed six thousand to be suffering with trachoma.

What tax-payer, no matter to what political party he owes allegiance, will deride, or deplore as too extravagant, any means taken by our Board of Health to protect our children from such a widespread, contagious and dangerous disease?

ECHOES AND NEWS.

NEW YORK.

The Craig Colony Prize Awarded.—The prize of \$200, annually given by Dr. Frederick Peterson for the best original essay on the etiology, pathology, and treatment of epilepsy, was awarded this year to Dr. Julius Donath, of Budapest, Hungary, for his paper on "The Presence of Cholin in Epilepsy and its Significance in the Production of the Convulsive Attack." The award was made by a committee of the New York Neurological Society, consisting of Dr. Pearce Bailey, Dr. C. A. Herter, and Dr. George W. Jacoby, and the essay will be published as soon as possible. Dr. Peterson again offers a prize of like amount for the same purpose and under the same conditions, viz.: (1) That the paper must show original research work; (2) that the subject matter of the essay shall not have been before published; (3) that all manuscripts submitted shall be in English and shall be sent Dr. Peterson, at 4 West Fiftieth street, New York city, before September 30, 1903, the successful manuscript becoming the exclusive property of the Craig Colony; (4) each essay submitted must be accompanied by a sealed envelope containing the name and address of the author and bearing on the outside a motto or device, which is also to be inscribed upon the essay.

Columbia University Lectures.—Eight illustrated lectures on the Physiology of the Nervous System and the Related Parts, will be given by John G. Curtis, M.D., Professor of Physiology in Columbia University, in the great hall of Cooper Union, on Mondays, February 9, 16, 23, and March 2, 9, 16, 23, 30, at 8 P. M. I. How we know that the brain is the seat of feeling, thought and will. II. How the nerves work. III. How the muscles work. IV. How we see. V. How we hear. VI. Taste, smell and touch. VII.

The involuntary workings of the nervous system. VIII. How our bodies keep their balance. The lectures are open to the public. No tickets of admission are required. The doors will be open from 7.15 P. M. to 8 P. M., after which no person will be admitted.

The Charity Organization Society.—Whereas, It has come to the knowledge of the Committee on Tuberculosis of the Charity Organization Society that many so-called specific medicines and special methods of cure for tuberculosis have been and are being exploited and widely advertised, and Whereas, The advertisements of some of these cures have made such reference to the Tuberculosis Committee of the Charity Organization Society, or to some of its members, as to create the inference that this committee, or its members, recommend or advocate the use of many such so-called specifics or special methods of cure for pulmonary tuberculosis, or consumption, and Whereas, There is no specific medicine for this disease known, and the so-called cures and specifics and special methods of treatment widely advertised in the daily papers are in the opinion of the committee without special value, and do not at all justify the extravagant claims made for them, and serve chiefly to enrich the promoters at the expense of the poor and frequently ignorant or credulous consumptives, therefore, Resolved, That a public announcement be made that it is the unanimous opinion of the members of this committee that there exists no specific medicine for the treatment of pulmonary tuberculosis, and that no cure can be expected from any kind of medicine or method except the regularly accepted treatment which relies mainly upon pure air and nourishing food.

General State Statistics for 1902.—According to the annual bulletin of the State Department of Health, issued January 31, 124,160 persons died during the year, making a death rate of 17 per 1,000 of population. The total number is about the average of five preceding years, but was about 5,000 less than the mortality of 1901. The decrease from last year was mostly in the winter months, but the midsummer mortality this year was unusually low. January was the month of the greatest mortality, and November of the least. The infant mortality was very low, almost 5,000 less than the average. Smallpox existed in the early months throughout the Adirondack region, where it has not recurred, save to a limited extent this present winter. During the year the disease has developed in 135 municipalities in all parts of the State. It was most prevalent during the first half of the year. It caused the same mortality as in 1901. There were 8,800 cases of death from pneumonia and about 5,500 from Bright's disease. Grip was estimated to have caused 4,000 cases of death in the early months of the year.

Typhoid Epidemic in Ithaca.—Ithaca is suffering from a pretty severe epidemic of typhoid fever, which shows no signs of abating. For days the City Hospital has been crowded with patients, and to-day, to make room, the nurses turned their apartments over to the patients. So pronounced is the demand for admission to the hospital that the matron admits only the worst cases. The Rev. C. W. Peiser, pastor of the Unitarian Church, has offered to turn his church over to the authorities of the hospital if needed, and it is thought that his offer will be accepted, if sufficient number of nurses can be secured to look after the sick. The Board of Health lays the blame for the epidemic upon the impure city water. An investigation is now being

made by Prof. Chamot of Cornell University. The health officers have urged that no one drink city water without boiling it. There are at least two hundred cases in the city at the present time. As yet there have been no cases of death and many of the patients have the fever in a mild form.

PHILADELPHIA.

Typhoid Attains Epidemic Proportions.—During the month of January, 1,303 new cases of typhoid fever developed in this city, 325 during the last week of the month. The deaths for the month were 161. It is estimated that between 3,000 and 4,000 cases are now under treatment.

Philadelphia Free to Accept Phipps Gift.—The Pennsylvania Legislature has repealed the Fow Anti-hospital Law and this city can now accept Henry Phipp's proposed gift of \$1,000,000, and erect near the center of population an institute for the study, treatment and prevention of tuberculosis. A part of the staff has been chosen. The number will probably be increased to thirty, each one qualified for laboratory as well as clinical work.

Contagious Diseases Hospital Abandoned.—The organization formed to build a hospital to be known as the McKinley Memorial Hospital for Contagious Diseases has been abandoned, and the ground owned by the Association will be sold. For eight years efforts have been made to erect a building, but there was little support by the people. The assets, over \$12,000, will be held until some other similar association is formed.

New State Asylum.—The new institution, known as the Homeopathic Insane Asylum, to be established by the State of Pennsylvania, will be located in Hanover township, Lehigh county. An expenditure of \$500,000 is contemplated.

Officers of County Medical Society.—The Philadelphia County Medical Society has elected the following officers for the coming year: President, Dr. F. M. Perkins; Vice-presidents, Drs. J. C. Cooper and W. S. Higbee; Secretary, Dr. W. S. Wray; Assistant Secretary, Dr. Ross H. Skillern; Treasurer, Dr. C. L. Bower.

Philadelphia Medical Club.—The annual election, held January 12, resulted in the choosing of Dr. E. E. Montgomery as President, and Dr. Guy Hinsdale as Secretary of the Society. The membership now approximates 500.

Mouth Infection.—At the County Medical Society, January 28, Dr. D. D. Smith, by invitation, presented a paper on the above subject, speaking from the standpoint of a practical dentist, who is also a physician. Dr. Smith stated that he had been working at his calling for 25 years, and only during the last eight had he grasped the true meaning of mouth infection. He then spoke at length regarding the mouth as a prolific source of contagion. All erupted tooth surface is bacterially infected, and in the adult there are from 20 to 30 square inches of such surface. Pyorrhea alveolaris is never of systemic origin, but always local, due to stagnant accumulations on the teeth. It never occurs where there are no teeth, and is readily amenable to treatment when seen early. Instead of being caused by kidney affections and uremia, it may be a cause of the latter conditions. Diseases usually attributed to faulty mastication or dental caries are very often due to neither. Mastication can be dispensed with in many cases without great loss to the individual, the indifference of the stomach to mastication and insalivation being proved by the normal digestion of

the edentulous. Much is said and written about the danger of infection from telephone mouth pieces, expectoration, beards, etc., but rarely is anything said about the mouth and its influence upon the health. Complete recovery from digestive disorders often follows extraction of all the teeth of the patient. Nervous, gastric and renal troubles are caused by foul accumulations on the teeth and susceptibility of the person to smallpox and similar diseases is increased by their emanations.

Proper Method of Cleansing the Teeth.—Dr. Smith said that in 1894 he sought the cause of dental caries and its relation to the deposits on the teeth and the health of the individual. Investigations showed that caries of the teeth was due to the accumulations on them. From this he formulated a method of treatment diametrically opposite to that in use before. Instead of confining his work to the repair of carious teeth he began prophylaxis. This consists in enforcing a radical and frequent cleansing of the teeth, thus providing a change in their environment. The removal of all deposits on the teeth, calcareous, secretions, etc., is the first step. Then the teeth are thoroughly polished by hand methods, a power polisher never being used for this purpose. Orange wood charged with pumice powder gives the best results. This cleansing not only prevents the beginning of caries in children, but aids greatly in the proper alveolar development. In older persons decay of the teeth is retarded. For the past seven years the effects of this systematic polishing of the teeth have been the source of constant delight. The polishing is done at intervals of about one month, or in severe cases much oftener at first.

Results of Systematic Cleansing of the Teeth.—All the people who have had their teeth systematically cleansed by Dr. Smith under the method outlined, show some improvement in general health. The breath is relieved of offensive odor, inflammatory conditions of the throat clear up, and cases of intractable dyspepsia are cured or greatly benefited. Two cases of pyorrhea alveolaris were completely cured. One case of nervous dyspepsia and stomatitis was cured after 18 months' effort. One case of long standing tonsillitis readily yielded after the teeth were kept entirely clean. Germicides will not accomplish this effect, however thoroughly they may be employed. Dentistry alone will yield such notable changes and properly educated dentists is the first step. Dr. Smith arraigned severely the dental profession for their shallow methods of work. They stick too much to the old lines, dealing with caries, making mechanical devices, etc., instead of making advances in their art. The medical profession must always supersede all others in relieving the ailments of the human race, but the dental profession should become a branch of the healing art. This it can do and yet stick to its own sphere—the mouth. Dentistry should be extended to meet these requirements. Specially instituted chairs, both in dental and medical colleges, should teach students the care of the mouth and the interdependence of the two professions in this sphere. Work along these lines will lead ultimately to the dethronement of a most potent cause of infection.

Huntingdon's Chorea.—The hereditary tendency of this disease was well illustrated by the history of a family given by Dr. D. J. McCarthy at the Philadelphia Neurological Society, January 27. The father had chorea and the history of the four sons has been traced. One died of pulmonary tubercu-

losis. The second is now fifty-two years old, and has had chorea for 14 years, mental symptoms having developed during the last two years. The third son developed Huntingdon's chorea with mental symptoms and finally committed suicide. The fourth son is now developing chorea, having exhibited deficient mentality for some time. Dr. McCarthy also reported the findings in an autopsy upon a man of forty-two years, who had died of Huntingdon's chorea. Changes in the nervous system consisted in a marked wasting of the frontoparietal convolutions, small hemorrhagic foci in the cortex, and perivascular cell accumulations in the frontal regions. Minute cavities were present in the cortex. In the basal ganglia, medulla and cord there was thickening of the intima and adventitia of the vessels and some perivascular sclerosis. The cord showed deficient staining of the lateral columns. There was some evidence of myxomatous degeneration of the choroid.

Multiple Fibromata Confined to the Internal Plantar Nerve.—This case was reported by Drs. W. J. Taylor and W. G. Spiller. The patient was a young woman who first came to Dr. Taylor's notice in 1888. Four years before she had sprained her left ankle, which had since remained weak. Afterward pain and soreness developed on the inner side of the foot, followed by swelling and redness. Later small masses could be felt on the inner side of the sole of the foot, these being hard and excessively tender to pressure. Ten in all could be made out. Operation was performed in 1888, thirteen tumors, varying in size from a hickory nut to a pea, being removed. Their removal gave the patient some comfort, but did not entirely relieve the condition. In 1890 a second operation was performed and two tumors removed. In 1897, six more were taken out. Temporary relief was followed by recurrence of pain and marked sweating of the foot began. In June, 1902, a fourth operation resulted in the finding and removal of five tumors, one of them being attached to the internal plantar nerve by long bands of tissue. The nerve itself was as large as an ordinary lead pencil, and five inches of it was resected. Since that time the patient has been free from pain for the first time in 14 years, and the sweating of the foot has also ceased. Dr. Spiller, who examined the removed tumors, said that histological examination showed them to be fibromata, and not true neuromata, although connected with the nerve. The proliferation probably began in the endoneurium. One of the bands extending between the large tumor and the nerve trunk had in it some nerve fibers. The case was a valuable one because of the long duration of the process without sarcomatous change, which has been noted in some similar cases.

The Histopathological Changes in the Cerebral Cortex of Epileptics.—By invitation, Drs. L. Pierce Clark and Thomas P. Prout of New York presented a communication on the above subject, the former speaking on the interpretation of the lesions. It was stated that, as it had been demonstrated that epileptic attacks were the immediate sequence of cell changes in the cortex, it was reasonable to suppose that the status epilepticus was the acute manifestation, and that such subjects were most liable to show the changes present in the climax of the disease. Hence every opportunity to study these changes had been seized. In all the cortex of 18 epileptics has been studied, seven of these having died during status. Attempts were made to rule out

post-mortem changes by securing the specimens as soon as possible after death, the longest time being seven hours and the shortest one hour. Tissue was hardened in absolute alcohol and a modified Nissl method of staining employed. Sections from a normal brain removed two hours after death were used for purposes of comparison. The cells of the cerebral cortex of epileptics showed the most striking change, this being present in all the cases studied. The cells of the second layer were swollen and the chromatic substance almost gone. The nuclei were swollen, this change being greater than the corresponding change in the cell. The nuclei were granular, often not clearly outlined, and in many instances the nucleoli were abstracted from the cell by the section knife, because they were loosened. This nucleolar abstraction was most marked in the status cases. In one square centimeter of a section from one case, 120 nucleoli were abstracted. The same phenomenon was seen only six times in 32 whole slides from the normal brain. This abstraction points to destructive changes in the cortical cells. It is not to be interpreted as the true pathology of epilepsy, but indicates cell death. The real pathology is yet to be determined, but the writers believe that the first effect of the excitants of epileptic seizures is exerted upon the nuclei of the cortical cells.

Physician Almost Completes Century.—Dr. Henry Helfrich, the oldest resident of Lehigh County, died at his home in Allentown, February 1. He would have been one hundred years old in July of this year. Dr. Helfrich had retired from active practice some years since, but was remarkably vigorous until a few weeks ago, and still prescribed for a number of people who came to his home.

CHICAGO.

New Hospital.—Drs. Nicholas Senn, Fernand Henrotin, and a number of other leading physicians and surgeons of this city contemplate the erection of a new polyclinic hospital on Oak street and La Salle avenue. It is said that this hospital will cost approximately \$300,000. There will be an attempt made to defeat the ordinance which the surgeons and physicians hope to have passed by the City Council, abolishing the frontage consents at present required before any hospital building may be erected. This measure has already been favorably passed upon by a subcommittee of aldermen, so the fight will be an open one on the floor of the council chamber.

Cocaine Abuses.—Already five druggists, who are alleged to have sold cocaine in violation of the law, have been indicted by the grand jury. Many letters written by wives who pleaded with druggists to refuse cocaine to their husbands have been presented to the grand jury. According to the law, no one can buy cocaine without a prescription from a licensed physician, and under this law the grand jury and State's attorney were acting. The State Board of Pharmacy opposes the sale of cocaine except for its legitimate uses, but when a regularly registered pharmacist fills the prescription of a physician, the law allows them to make no complaint.

Cocaine Habit.—Dr. Sanger Brown, in speaking of the horrors of the cocaine habit, says, among other things, that the use of the drug may begin through an effort to alleviate pain or from other causes, but whatever the beginning, cocaine soon holds the patient in its merciless grasp, and the strongest person is reduced to a wreck. The im-

mediate effect on the patient is a feeling of exaltation and of well-being. Life's troubles are forgotten for the moment, and pain is deadened. But this is only for the moment. The addiction in its early stages has a tendency to lower the moral tone, and there is also a marked physical deterioration. The patient becomes nervous and irritable, and is unable to apply himself efficiently to any line of endeavor. While under the stimulating influence of the drug, he may accomplish a little, but the tendency is strongly downward. Cocaine, unlike some other stimulants, seems to operate more peculiarly on the brain cells. There are other stimulants which have as much or more tendency to quicken the circulation, but they do not seem to produce the same dreamy sense of exhilaration that accompanies the use of cocaine.

Cure of Cocaine Habit.—The cure of the cocaine habit, when a cure is possible, as is the case in most instances, requires the best of medical care in a hospital or sanitarium. The patient must place himself under the complete control of the physician, and in the average case should remain under treatment from four to six weeks. Such treatment, of course, is beyond the reach of all victims of the drug.

Celebrating Anniversary of Founder's Day of the Northwestern University.—The celebration of the fifty-second anniversary of Founder's Day by Northwestern University occurred Jan. 28, at the Auditorium.

Degrees Conferred.—The degree of LL.D. was conferred on Dr. W. W. Keen, of Philadelphia, Professor of Surgery in Jefferson Medical College. Dr. Edward C. Kirk, Dean of the Dental School of the University of Pennsylvania, also had the degree of Doctor of Science conferred on him.

The Place of the Professional School in the Modern American University.—President Hadley, of Yale, delivered an address on this subject. He contrasted the English and German universities, and declared the American university should steer in a middle course, avoiding the extreme practicalism of the German and the extreme idealism of the English institutions. He said there are two conceptions of a university, the German and the English. The German regards it primarily as a group of professional schools. It has its three faculties, devoted to the learned professions of theology, law, and medicine, and a fourth faculty, which until the last century was a sort of college of arts, intended to prepare the pupil for the professional school, but which has now become a faculty of philosophy, intended for the training of teachers and investigators. To an institution which has these four faculties the German gives the name university; to one which does not possess them they deny the right to the name. Opposed to this is the English conception, which takes little or no account of professional training. In the opinion of those who hold the English view, professional schools are mere accidents of university development rather than its essential features. He does not believe that either of these views in its extreme form is correct. He would not deny the title university to an institution which was successfully conducted, either on the old English model or on the old German model, but he believes that in each case it would fall short of the full realization of what a university can be and ought to be. A university of the English type is likely to fall into idealism. Without the infusion of a strong element of professional study into the university life, this danger becomes a serious one.

Speaking of the preliminary course, he stated that it is only for the so-called professions of theology, law and medicine that this course in college is anywhere required as an essential. He believes that this requirement is a mistake, in that it involves an effort to perpetuate a distinction which is contrary to the spirit of American institutions. Its tendency is to shut out boys whose fathers have no money from the practice of these callings. He also believes that it will tend to lower the standard of collegiate degrees, for if we are to require a certain degree of all candidates for law or medicine, we shall be under constant pressure to reduce the requirement for that degree to the minimum, which it is easy to exact of all. Let the preliminary examinations of professional schools be fixed as high as may be necessary, but let us not, in lieu of such real requirements, insist on preliminary residence at a collegiate institution from those who lack either the money or the inclination to profit thereby, and let us in the future, as we have done in the past, construct our collegiate courses to meet the needs of those who want them, instead of reconstructing them to meet the needs of those who do not want them.

GENERAL.

Medical Journal Club of Baltimore.—The Medical Journal Club gave their annual banquet last night at the rooms of the Medical and Chirurgical Faculty, 847 North Eutaw street. Dr. John C. Hemmeter acted as toastmaster. The faculties of the Johns Hopkins, College of Physicians and Surgeons, and of the University of Maryland, were well represented. Drs. Llewellys F. Barker of Chicago, and Simon Flexner of Philadelphia, were among the invited guests. The suggestion made in the new Medical Library and Historical Journal that a national organization with some such title as American Association for the Study of the History of Medicine is being taken up very enthusiastically in Baltimore. The Johns Hopkins Hospital Historical Club, the Medical and Chirurgical Journal Club, and the College of Physicians and Surgeons Medical Society have taken the matter up quite heartily. Such names as Drs. William Osler, William H. Welch, Stewart Paton, Harry Friedenwald, Henry M. Hurd, and John C. Hemmeter are mentioned as in favor of the movement.

Fourteenth International Medical Congress at Madrid.—It is believed that a considerable number of American physicians will attend the fourteenth International Medical Congress, to be held in Madrid, April 23 to 30, 1903. As all those who wish to attend the Congress have a common objective point, it is thought that they can be associated to advantage in one or more excursion parties. In this way the social features of the trip will be enhanced, and each individual will be surrounded by those who are personally congenial. By such association better accommodations can be secured and at a considerable reduction in price. Additional security will also be attained, as parts of the trip which include comparatively unfrequented routes of travel, will be under the charge of a travelling conductor who is thoroughly conversant with the language and customs of the countries visited. As there will doubtless be some divergence as to choice of routes depending on individual inclination and previous opportunities of foreign travel, several returning routes have been selected, the itineraries of which, although separate from a portion of the journey, have been arranged that the principal points are visited to-

gether. The party will sail from New York city, on April 11, on the twin-ocean steamer, "Princess Irene," North German Lloyd, direct to Gibraltar. Tickets for the round trip, including hotel and sight-seeing, \$265, \$375 and \$550, according to the tour selected. It is important that all who contemplate taking this trip should register at once, so that reservations for hotel in Madrid may be satisfactorily arranged. Final arrangements will be in the hands of the well-known conductors, Thos. Cook & Sons, which insures perfect and complete service in all details. Full information and copies of itinerary may be obtained by addressing either of the last named undersigned, W. W. Keen, Howard A. Kelly, Robt. T. Morris, Walter Wyman, A. Vanderveer, Lucien Howe, Nicholas Senn, Jno. B. Murphy, Chas. H. Hughes, C. A. L. Reed, Joseph Mathews, W. F. Southard. Ramon Guiteras, 75 West Fifty-fifth street, New York City. Chas. Wood Fassett, Krug Park place, St. Joseph, Mo.

CORRESPONDENCE.

FORMALIN SOLUTION.

NEW YORK, January 27.

HON. HOMER FOLKS, Commissioner,

DEAR SIR: The "Formalin" treatment requires more than ordinary caution. It has come to my notice that lately Formalin solutions have been used in the public hospitals under our care for injection, where the strength of the Formalin was absolutely unknown to the physician. As is well known, Formalin is a solution of Formaldehyd in water. Formaldehyd is an oxidation product of methyl—or pure wood alcohol.

According to modern theories, which I have also tried to prove in one of my publications, the efficiency, i.e., the poisonousness of the aldehydes is so great on account of their great reactivity with the amido groups of the protoplasm. Formaldehyd especially is probably the greatest germicide known and kills anthrax bacilli in solutions of 1 to 125,000.

Formaldehyd is supposed to be had in 40 per cent. aqueous solutions, miscible with water in all strengths.

The fact is, however, that Formaldehyd as met with in the market varies all the way from 36 to 25 per cent. It is, therefore, of the utmost importance that the solutions be standardized and diluted to say, 1 to 2,500. In such great dilution Formaldehyd will keep in well-filled small glass-stoppered bottles, while the strong solutions change from day to day.

This department proposes to standardize their solutions in the future and supply only such to the hospitals for subcutaneous injection. It would be well worth while for the hospitals generally to follow this procedure for the sake of their patients.

Would you kindly send a copy of this communication to Dr. W. Mabon.

Very respectfully yours,

W. E. DREYFUS, Ph.D., Chemist.

SOCIETY PROCEEDINGS.

MEDICAL SOCIETY OF THE STATE OF NEW YORK.

Ninety-seventh Annual Meeting, held at Albany, January 27, 28 and 29, 1903.

SECOND DAY—JANUARY 28TH.

(Concluded from Page 234.)

Periduodenal Abscess.—Dr. William S. Bainbridge of New York City read a paper describing a case of periduodenal abscess, secondary to perforative ulcer of the duodenum and discussing other cases of the same

kind in the literature. Altogether there have been 22 cases of periduodenal abscess reported. Of these only two were recognized before death. One of these was cured by operation, but the convalescence was very prolonged; another one was recognized, but proved fatal. The curious thing about the condition is that occurring as the consequence of ulcer, there may be obscure symptoms at long intervals and apparently with no connection with one another and then sudden lighting up of serious or fatal symptoms.

Illustrative Case.—Dr. Bainbridge's case occurred in a bachelor whose father died of pyloric cancer. The man had suffered from appendicitis nearly a year before, but the symptoms had subsided at the end of seven days. The first symptom of his present condition seemed to be an acute gastritis which came on immediately after drinking ginger ale. There was pain and tenderness in the right epigastrium and the abdominal muscles were rigid above the umbilicus, especially on the right. The pulse was 84, there was no temperature and he vomited everything for two days. All symptoms disappeared and after six days he insisted on walking to his store and after he came home ate three small oranges at once. Vomiting supervened and continued for 24 hours. For fourteen days he had to be fed entirely by the rectum. Then he was allowed to take food and retained it, but lost weight constantly. He became emaciated and slightly icteric. In the eleventh week he died of exhaustion.

Course of Symptoms.—He had no temperature except twice during the disease, each time there being a preceding chill. Absence of temperature seems to be a characteristic of these cases. At the autopsy, very extensive adhesions were found and the presence of the perforation in the duodenum with periduodenal abscess was easily made out. The absorption of pus from this abscess cavity seemed to prevent the proper process of metabolism.

Differential Diagnosis.—These occur much more frequently in males than in females. The proportion is not as great as stated by Fenwick, 10 to 1, but it is probably about 2 to 1. Of the 26 cases 15 are men, 10 women and once the sex is not stated. The main element in the diagnosis is the position of the pain and the localized tenderness. In this case the patient could not lie on his right side. Sometimes there is a history of previous gastrointestinal disturbance, due to the presence of the duodenal ulcer. Hematemesis, or the passage of blood by the rectum, is not common. The disease may occur at any age. In the recorded cases all ages are represented from twelve to sixty. Differentiation must be made especially from appendicitis and right-sided empyema. At the autopsy, a chronic parenchymatous nephritis was found. This seems to be a frequent accompaniment of duodenal abscess.

Pseudo-Diverticulum of the Duodenum.—Dr. Lewis S. Pilcher of Brooklyn said that he had had a case of periduodenal abscess which he reported some twelve years ago, but which got into the literature as a duodenal pseudo-diverticulum. The patient was a young man who came complaining of pain in the right epigastric region with tenderness and who presented some evidence of a tumor in this region of the abdomen. At operation an inflammatory tumor was found situated behind the peritoneum in which pus and undigested food were present. Three days later peritonitis set in and death occurred. The autopsy showed a defect in the bowel on its posterior surface, about $1\frac{1}{2}$ inches in diameter. The abscess which resulted had been in existence for many weeks and yet had given absolutely no symptoms. It was only on its approach to the surface that symptoms occurred. The latency of so serious a condition for so long a time is extremely interesting.

Subphrenic Abscess.—Dr. Henry L. Elsner said that the periduodenal abscess is really one form of subphrenic abscess. It is not so rare as might seem from the infrequency of cases in the literature. It is curious how often it occurs in combination with parenchymatous nephritis, as in Dr. Bainbridge's case. Dr. Elsner says that he has seen a number of cases of the disease, some of them only as far as the ulcer stage. The diagnosis is not difficult, but the previous history of occasional attacks of gastrointestinal irritation can be obtained and the occurrence of blood in the stools. The interval between blood in the stools and the serious symptoms from perforation of the duodenum may be very long. A well-known physician of central New York, who was taken suddenly ill at the Thousand Islands, with symptoms of perforation, had suffered from hemorrhages of the bowel four years before.

Dr. Bainbridge in closing the discussion said that abscess is not near so frequent as ulcer. It is probably more frequent, however, than might be judged from the literature. The diagnosis is usually missed. With care this need not occur quite so frequently. Ulcers of the duodenum are apt to run a very latent course and are by no means always associated with hemorrhage. Vomiting does not often occur in these cases, so that there is very little to call attention to the serious condition present.

Functional Sexual Disorders in the Male.—Dr. Frederick S. Sturgis of New York read a paper on the treatment for functional disorders of the sexual organs in the male. These are often set down to masturbation in early years. It has come to be almost an article of faith with most physicians that masturbation has such an effect. As a matter of fact, it is a minor causative agent. Another factor is supposed to be withdrawal during coitus. If seminal emission takes place, this practice, however, does not seem to be necessarily so harmful as has been stated. If there is no reflex satisfaction to the intense nervous state, then there are sure to be sympathetic neurotic disturbances. The most important factor in the production of functional sexual disorders is undoubtedly devotion to woman not wisely but too well.

Psychic Disturbances.—Psychic disturbances of various kinds are set down as causative of sexual disorders of a functional character. Usually, however, there is some basis in the physical condition of the sexual organs, for the development of the neurosis as well as of the mental state. Among the Germans it is said that about 95 per cent. of the men have suffered from gonorrhea. This is too high a proportion, but certainly more than 50 per cent. have had the disease and it had left some organic change behind it. Gonorrhea is not the simple local disease that it used to be considered, and is at least as bad in its effect as its congener, syphilis.

Treatment of Functional Disorders.—Dr. Sturgis said that all of these functional sexual disorders are called debility and are set down to some weakness of the organism. Hence stimulants are always employed. One enterprising firm has insisted that damiana was used by King Solomon. Phosphorus and strychnine in its various forms, and other stimulants are employed. This is like spurring a tired horse. If internal medication can do any good for these cases it must be in the form of sedatives instead of stimulants. Great harm is undoubtedly done, and has been done, by the use of stimulants in these cases. The benefit derived from them is only illusory and they really cause the condition to become chronic.

Accessory Local Treatment.—Treatment should not to be limited to internal medication. In fact this

should be only an adjunct to the local treatment. Local remedies accomplish real good. Hot and cold sounds are the best thing for the purpose. Cold usually proving of more avail than heat. Dilute solutions of nitrate of silver irritate for the moment, but eventually prove sedative by lessening the hyperemia of the mucous membrane of the urethra. For sterility little can be done. If it is due to epididymitis there is no cure in spite of all the operations that have been devised for this purpose. Electricity in Dr. Sturgis' hands has proved a disappointment. Some slight good has been derived from galvanism and weak currents frequently applied. Faradism has not only done no good, but sometimes seems to do harm. The use of stimulating drinks must be forbidden. This includes not only liquors, but especially coffee. It seems to have a bad effect on the sexual powers. It is well known that the chronic toper is a poor bed fellow. Meantime, of course, the number of quack remedies for these conditions will not decrease. In the words of the Latin poet, the people want to be deceived and they will be deceived.

Sexual Debility and Operative Measures.—Dr. Dawbarn of New York said that two operations seem to be of some benefit in the treatment of sexual debility. Moses, the great Law-giver, was greater in nothing than in his requirement of circumcision for all male children. Dr. Dawbarn did not hesitate to say that at the present time no better means for the relief of many sexual ills could be obtained than by circumcision. Many adults after circumcision come back to say that their sexual powers have been improved. At times lack of sexual potency is really due to a dilatation or varicosity of the veins of the penis. Some of these may be tied off. The surgeon must be careful, however, not to include the accompanying nerve or there may be unfortunate and undesirable sequelæ. One patient of Dr. Dawbarn's came back to say that he had vigorous erections but that there was a sense of numbness.

Operations Upon the Vas.—Dr. Dawbarn said that operations upon the vas and epididymitis are not so hopeless as Dr. Sturgis would imply. The distinguished New York surgeon in performing an operation for hernia some years ago found that he had cut the vas. He introduced a small strand of catgut into the cut end bringing the portions together over this. This acted as a mandril and he was enabled to suture the vas. In this case patency of the canal seems to have been secured for several years afterward, the patient had still a perfectly normal testicle on that side.

Circumcision as a Suggestive Factor.—Dr. Abraham Jacobi of New York said that circumcision in itself did no good for these neurotic sexual conditions, but the suggestive element of having something done reacted to lessen the patient's nervousness and so relieved his symptoms. A cure may be effected by suggestion, and the best thing to do as a rule, is to keep patients from worrying over their condition. Masturbation is undoubtedly a very frequent cause of impotence. It does not in itself weaken the generative organs, but it leads to frequent nocturnal emissions and this proves more serious for the patient's sexual health than the previous masturbation. There is of course a large psychic element in these cases. Newly married men come sometimes almost in despair to complain that they have been unable to accomplish their marital obligations. They must be told that this is not so very unusual and that it will pass off and if they once succeed they remain cured.

Circumcision and Impotence.—Dr. Sturgis said that in itself circumcision was not at all curative of functional sexual disorders. They occur not infrequently among those circumcised from their earliest years. If there is a long, dirty, or adherent prepuce this should

be removed and it will assist in the cure of the condition. It has been the custom too much to set down certain functional sexual disorders to psychic disturbances. It must not be forgotten that there is always a physical basis. Sexual disorders are due rather to too frequent copulation than to masturbation. Act for act, masturbation is no worse for the sexual system than copulation.

Plasmodiophoræ Brassicæ.—Dr. Harvey Gaylord of Buffalo read an article on this parasite which occurs in trees and causes tumors upon them. The interesting feature of the disease is that the parasite finds its way into a cell and stays there until it has exhausted the vitality of the cell. It causes proliferation of the cells but the parasites exist in each cell. It is a true form of symbiosis. Curiously enough too, while the parasite may be inoculated from turnip to turnip, it can not be inoculated from turnip to cabbage. These features help us to understand better the proliferation of cancer cells.

Special Peculiarities.—The organism in the ground occurs in quite a different form to that which it assumes in the plant. As seen ordinarily it looks not unlike a cell, and at times is actually incapable of distinction from small cells. It blackens with osmic acid, as if it were fat and there is a distinct ameboid stage. In this it resembles certain appearances that have been noted in vaccine and variolous material. The parasite evidently belongs to the class of beings known as protozoa. This is also an interesting feature, for the cancer parasite has long been considered to be a member of this family. This parasite must have an intermediate host. It is probable that the intermediate host of the cancer parasite will have to be looked for and found before the true solution of the cancer etiology problem will be solved satisfactorily. How much this complicates the problem may be realized from the fact that certain of the fruit worms have two intermediate hosts. The plasmodiophora brassicæ takes a very special interest then in the light of its possible analogies to the cancer parasite of human beings. The subject is now under study but must be pursued along biological rather than ordinary bacteriological lines and the progress of investigation is necessarily slow.

Primary Carcinoma of the Appendix.—Dr. Arthur W. Elting of Albany reported three cases of this usually considered to be infrequent affection and thinks that the disease is not so rare as has been believed. Early reports of primary carcinomata of the appendix are unauthentic. Out of forty cases found in the literature eight are surely not true primary carcinomata. Dr. Elting's first case was found in a man, aged eighty-one years, with weak heart and pulmonary complications. His death was due to these difficulties of his thoracic organs, though there had been some symptoms of chronic appendicitis for a considerable time with tenderness and some pain in his right iliac fossa. One of the cases was a young man of eighteen in whom acute appendicitis developed followed by an abscess that had been opened, a fistulous tract remaining for many months. The patient lost forty pounds in weight and an operation had to be done. In this case it was found that cancerous degeneration had affected neighboring parts of the intestines very extensively, all of the cecum had to be removed also a considerable portion of the ileum and some inches of the jejunum which had become adherent to the cancerous mass and had become infiltrated with cancer cells. Curiously enough there was very little glandular enlargement and no metastasis, the cancer spreading entirely by continuity. It seems that some of the cases, at least of chronic appendicitis in older people (though from the latter case it is evident that young persons are not exempt), is really due to carcinoma.

Dr. Willis G. MacDonald of Albany, in discussion, said that as these cases of Dr. Elting's had occurred in his surgical service he was deeply interested in them and felt that there was no denying Dr. Elting's conclusion that carcinoma of the appendix is not so rare as has been thought. This association of a surgeon and a pathologist is likely to prove of service in making details of cases clearer to the surgeon and leading to the true significance of disease in many doubtful cases.

SYMPOSIUM ON ARTERIO-SCLEROSIS.

Early Symptoms of Arterio-Sclerosis.—Dr. De Lancey Rochester of Buffalo said that at a late stage when the arteries are hard and the left ventricle is enlarged and the blood pressure high it is easy to recognize arterio-sclerosis. At the beginning, however, considerable sclerosis of arteries may be present without the physician's attention being called thereto. It is well to remember that all the peripheral arteries should be examined or some may show signs of sclerosis when others do not. Dr. Rochester gave the details of some cases in which there had been symptoms of arterio-sclerosis masked by severer symptoms in internal organs. The most frequent early symptoms occur in the gastro-intestinal tract. These are due to interference with the blood supply of the mucous membrane and the musculature of the digestive tract. Frequent accompaniments are constipation and indigestion. In these cases, not seldom it will be found that exposure brings on attacks of shortness of breath as the result of reflex disturbance. Dr. Rochester described a case in which asthmatic attacks after exertion constituted the symptoms for which an arterio-sclerotic patient came under treatment. In spite of the asthmatic attacks and during their continuance the second aortic sound was distinctly exaggerated. Renal symptoms in arterio-sclerosis are due to insufficiency of excretion. It is not long under these circumstances before other organs begin to manifest signs of functional derangement because of the presence of toxins in the blood. Under these circumstances particularly, the arteries in the brain are liable to suffer degeneration and apoplexy ensues. It is often said that cardiovascular changes may be recognized by the thickening of the radial artery. When arterio-sclerosis exists the vessel fills slowly, high pressure remains for a perceptible period and then the vessel empties slowly. Sansom's suggestion to place the index finger lengthwise along the radial artery forms an excellent means of determining the mode of filling of the artery and the continuance of blood pressure within it. The other method recommended, that of using two fingers and compressing the artery in its proximal portion and then feeling below the point of compression with the other finger is also an excellent means. If the vessel can be felt beyond the point where the pulse is obliterated, especially if it can be rolled beneath the finger, there is surely thickening of the artery present. For the recognition of these changes in the artery the sphygmograph, or blood-pressure instrument, does not give as much assurance as the trained fingers.

Arterio-Sclerosis and the Heart.—Dr. Glentworth R. Butler of Brooklyn said that there are two groups of heart symptoms that occur as a consequence of arterio-sclerosis. In the one group the coronary arteries are involved, in the other they are not. If the coronaries are intact usually the only change in the heart is a simple cardiac hypertrophy. In the senile form of arterio-sclerosis there is no cardiac hypertrophy. At times the changes in the peripheral arteries are very marked. They become rigid and have the goose-neck feeling. This is the feeble old man type of arterio-sclerosis. When degeneration of arteries occurs in

younger individuals, it is either because they are big eaters, or hard workers. Not infrequently the symptoms are the same as those of valvular heart disease. The presence of a systolic murmur will not infrequently lead to a suspicion of mitral insufficiency. Usually early in a case of arterio-sclerosis there occurs interference with the capillary vasomotors that causes leaky skin. Not infrequently the pulse does not correspond to the heart, there being a number of ineffectual systoles. One of the most frequent symptoms of the early stage is a stimulation of gastric attack, really due to the heart. True angina is rather rare and occurs only in advanced cases of arterio-sclerosis when the coronaries are affected or the myocardium is much involved. There may be no thickening of the palpable arteries and yet true stenocardia. If the arteries are not thickened then the blood pressure must constitute the warning sign of the presence of arterial degeneration in the arteries within the body. The pathognomonic sign is the click of the aortic second sound. This is very characteristic. Gastralgia often precedes attacks of true angina. Painful dyspeptic attacks must always be suspected. If the digestive disturbances are marked and have continued for a considerable time, notwithstanding care of the diet a latent heart lesion will be found as the basis of them. There are other localized sclerosis of arteries that are of importance. The Adams-Stokes' syndrome, in which the patient becomes somewhat comatose and the pulse may fall to twenty to forty per minute, seems to find its best explanation in a localized degeneration of the arteries of the medulla. Dr. Butler recently saw a patient in one of these attacks in which for three minutes there was no breathing and no pulse. Then there was a single heart beat. The heart beat rose to four and then to ten and then to twenty-four per minute. Consciousness returned after an hour. There was no hemiplegia.

Arterio-Sclerosis in the Kidney.—Dr. Irving P. Lyon of Buffalo said that arterio-sclerotic degeneration of the heart and the kidney frequently occurred together and it was practically impossible to decide which was primary. Not infrequently the history of the case shows that the presence of some toxin in the circulation is the basis of the affection and that it has probably acted on the heart and kidney as well as on the arteries of the system. The most frequent causes are plumbism, gout, alcohol, syphilis, and hard work. Sex seems to bear an important etiological relation, but this is only because males are much more liable to the causes of arterio-sclerosis just mentioned than are females. In these cases it is extremely important not to use the dread word Bright's disease, because this will scare the patient and make the after-course of the case much less promising. Such cases need to be encouraged and yet at the same time they must be kept from indulging in intoxicant materials or in overwork, and must be made to lead quiet lives.

Arterio-Sclerosis and the Digestive System.—Dr. Charles G. Stockton of Buffalo said that the first symptoms of arterio-sclerosis occur more frequently in the digestive tract than anywhere else. Even ulcers of the stomach may be due to degeneration of the vascular supply of the stomach walls. Virchow pointed out that thrombosis of the vascular system was apt to be followed by digestion of the stomach wall and the resultant peptic ulcer.

Intestinal symptoms in old people particularly are much oftener due than has been thought to degeneration of the arteries. Schroeter of Vienna pointed out not long ago that even meteorism and colic might be due to lack of blood in the intestinal tract. These symptoms are relieved more by the nitrites than by any other

form of treatment. Carminatives, instead of doing good, are prone to do harm. These symptoms come on at times when the gastro-intestinal tract has the most function to perform, that is not long after eating. Dr. Stockton said that Ortner reported a case in which a distinct decrease in peristalsis seemed to be due to the disturbance of blood supply consequent upon arterio-sclerosis. This subject is new, however, and the evidence as yet is rather meager. Undoubtedly some obstinate cases of constipation in the old, are due to arterio-sclerotic changes in the arteries of the intestinal wall.

Gastralgia and Heart Pang.—Intense gastralgia is very frequently not a true gastric colic, but is really a manifestation of angina pectoris, or breast pang. The pain is apt to occur just at the pit of the stomach and its connection with the heart may remain utterly unsuspected. Dr. Stockton not long ago had an experience with a case like this in which the pain was relieved for some time and then recurred and the patient expired suddenly on the third day. At the autopsy it was found that the death was due to rupture of the heart wall. Sixty per cent. of the cases of gastro-intestinal symptoms in the old are due to arterio-sclerosis. The majority of those who suffer from arterio-sclerosis have gastro-intestinal symptoms during the course of their disease.

Arterio-Sclerosis and the Nervous System.—Dr. William Browning of Brooklyn read a paper on the connection between degeneration of arteries of the arterio-sclerotic type and various nervous affections and symptoms. Vasodilator drugs often do good for nervous symptoms and it is consequently easy to understand how the disturbance of blood supply consequent upon a thickening of arteries and their failure to be influenced by the sympathetic system would react to produce nervous symptoms. In the brain arterio-sclerotic changes give rise to such important affections as epilepsy, especially that of the Jacksonian type. When there is advanced arterio-sclerosis, patients are apt to suffer with cerebral symptoms during hot weather. Undoubtedly at times when the peripheral arteries in other parts of the body are not affected by the sclerotic changes those of the brain are affected. There may be transient spasm of such affected arteries with vertigo or the limbs may show distinct tendencies to go to sleep. Ocular symptoms are the most important diagnostic aids in these cases. An examination of the ground will often show the visible arteries of the choroid thickened and tortuous.

There is no doubt that trauma of itself favors arterial change. In these cases the reaction after the trauma in such delicate tissues as those of the nervous system leads to the absorption of cellular material in forms that are toxic for the cells lining the arterial walls. Undoubtedly the presence of various toxemias causes degeneration of the arteries of the nervous system. Uric acid for instance may lead to arterio-sclerosis that under some circumstances is especially pronounced in the nervous centers. Arterio-sclerosis associated with nervous symptoms is said to present an especially bad prognosis. This rule is not absolute. When the peripheral arteries are not diseased there may still be sclerotic changes in the arteries of the nervous system. Arcus senilis is sometimes said to make the prognosis bad. The change that produces arcus senilis, however, is not necessarily associated with arterial change and it may exist for many years, without any symptoms of true arterio-sclerosis. When nervous symptoms are associated with arterial degeneration there is necessity for open air life and for a let up in physical and mental activity. Patients should not be advised, however, to give up their usual occupations entirely, since they are apt to worry

more and suffer from introspective consciousness of all their ills when they have nothing to do. Open air is the most important element in the treatment. After this hydrotherapy, but without any extremes in its application. Where patients indulge in excesses of any kind, either of eating or drinking, these must be given up.

Arterio-Sclerosis of Mental Disease.—Dr. Adolph Meyer of New York said that the brain aged independently of the rest of the system, and that even when arterio-sclerosis exists in other parts of the body, the arteries of the brain may prove to be thoroughly flexible and without degeneration. On the other hand there may be arterial degeneration in the brain, without other arteries being affected. Arterio-sclerosis affects the brain either indirectly or directly. In the first case the brain suffers in its nutrition, the sclerotic condition of the kidneys preventing proper elimination. Sclerosis may occur as a consequence of the spread of the process of degeneration from centrally situated arteries. On the other hand it may be due to lack of nutrition for the arteries themselves, whose resistive vitality is also lowered by the presence of toxins in the circulation. It cannot be said, however, that arterio-sclerosis directly affects the brain in such a way as to cause mental disease. It makes the prognosis worse, but does not necessarily cause special symptoms nor modify types of mental disease. It is after the age of forty-five especially that degeneration of arteries is active. The insanities that occur after this period bear no particular relation to the arterial process. The principal forms are alcoholic insanity, general paralysis, usually due to previous syphilis, mainly in cases that have had a number of attacks before, paranoia, anxious melancholia and forms of hypochondriacal insanity. All of these may occur at early periods of life, or in older persons, without any degeneration of arteries. All of these diseases, unless dementia supervenes, have the same prognosis after forty-five as before, that is as far as the lesser vitality of the individual permits. Insanity in the old is not arterio-sclerotic, but senile in origin. The two processes run together, the degeneration of the nervous centers and of the arteries, but bear no causative relations to one another.

There are cases of insanity that occur, however, with focal lesions. Some of these have foci of softening, with localizing symptoms. At times there are degenerative areas in the centrum ovale. Again, there is a lesion in the anterior limb of the internal capsule. This lesion is apt to cause intermittent laughing and crying, or a continuance of either stage without due reason.

What is mainly needed is the maintenance of safe and simple conditions of life. They must be placed under circumstances in which there shall be no worry. The principal adjuvant to a more favorable prognosis in these cases is to get people out of business and yet furnish them with some occupation of mind and with some necessity for getting into the open air that will maintain their general health and at the same time prove beneficial to their mental hygiene.

Slow Pulse.—Dr. Thomas E. Satterthwaite said that 58 American physicians have been sufficiently interested in cases of slow pulse to report them. The condition is sometimes spoken of as bradycardia or brachycardia. These names are unfortunate, however, since the word cardia indicates, or implies that the key of the trouble is in the heart. This is not true. It must be remembered that there is often a variation of rhythm between the heart beat and the blood vessels, so that while the heart may beat normal in number, the pulse beats may be only one-half as many. True bradycardia means a slow heart, that is, a slow action of the cardiac

muscle. In good health the pulse varies in different individuals, but is supposed to be between 70 and 80. Many perfectly normal people, however, have a pulse that is in the sixties. We talk of an infrequent pulse when the number is below sixty. Pulsus infrequens seems the best technical term for the condition.

There is a well-recognized tendency to the occurrence of slow pulse which is normal or physiological under certain conditions. After forty-five years of age, about one in 40 have a pulse that runs below 60. Not infrequently in these cases it will be found that there is no true rhythm between the pulse and the heart beats. Stokes described a case in which the heart beat 36 though the pulse was only 28. There is a congenital slow pulse, usually between 50 and 60 that occurs in families. The slow pulse of pregnancy is well known. Napoleon not only had a slow pulse, normally below 40, but whenever his pulse beat was higher than 40 he was uncomfortable. Vigouroux described a case that was perfectly healthy and not uncomfortable, though the pulse beat was never above 20.

Etiology of Pulsus Infrequens.—Besides the constant slow pulse, there is a paroxysmal slow pulse. This is usually due to the presence of poisons in the circulation. It may occur during any of the infectious fevers. All cumulative poisons cause it. It is well known in blood poisoning, in uremia, in cholesteremia and in other conditions of metabolism that are liable to produce coma. Probably the most frequent cause of slow pulse is organic disease of the brain. Out of 100 cases of pulsus infrequens, according to Grove, 6 were due to heredity, 24 to arterio-sclerosis, 10 to digitalis, 9 to nervous conditions and 43 occurred during convalescence from serious and exhausting illness. The extent to which infrequent pulse may proceed without death intervening is illustrated by cases reported in which the cause was some lesion of the brain. In one patient with bony pressure on the medulla the pulse was for a considerable period, seven per minute. In another patient the pulse was but four per minute. These very slow pulses are usually due to lesions at the base of the brain. It is often said that abnormal increase and decrease in the frequency of the heart-beat is due to the presence of a lesion of the accelerator or inhibitory nerve of the heart. This theory is not as widely accepted as it used to be. It is evident now that conditions of the heart muscle itself may cause especially slowing of the pulse. It must not be forgotten that the first spontaneous motion observed in the fetus of all animals is the rhythmic contraction of the vascular fold that is later to become the heart muscle. This occurs long before any nerves are present.

Stokes-Adams Pulse.—Dr. Satterthwaite said that very slow conditions of the pulse, as in Stokes-Adams disease are compatible with long life, even though the condition may be accompanied by a long period of unconsciousness. In one of his patients unconsciousness continued for a week, the pulse beats being slower than the respiration; yet two years afterward the patient was apparently well. There is a group of gastro-intestinal irritations which affect the heart. In these cases it is always important to decide whether the pulse beat and the heart beat are equal in number. Not infrequently will it be found that they are not synchronous.

Prognosis and Treatment.—The prognosis of these cases of pulsus infrequens is on the whole unfavorable. It is important to remember that as a rule no attempt should be made to accelerate the pulse by treatment. The heart must be let go its own way and there must be no whipping of it into extra activity. Alcohol must be used with care and the nitrites will often be found of service, but their use depends upon the general con-

dition. Sedatives rather than stimulants do good. The most efficient remedies are Hoffmann's anodyne, camphor, valerian and occasionally the bromides. Before any treatment is undertaken, it is important to consider whether the condition is physiological or pathological, and if it involve both the heart and the pulse, or if it is the pulse only that is infrequent. There is a distinct danger from the use of digitalis. Hydrotherapy and compressed air may give service in the treatment of these conditions whenever there is discomfort. On the whole, however, it must be said that our knowledge of the condition is inadequate and there is plenty of opportunity for clinical investigation of a most valuable kind.

Differing Localization of Arterio-Sclerosis.—In opening the discussion Dr. E. Libman of New York said that often the sclerotic process in the arteries is limited to a very small area. There may be atheroma of the aorta with no further sclerotic changes. This atheroma may cause nodules around the openings of the coronary arteries that may involve the beginnings of the coronaries and no further. In the abdominal arteries there are often strictly localized areas of arterio-sclerosis. Not infrequently there is a sclerosis of the splenic artery with multiple aneurisms. In one case seen not long ago there was a congenital stenosis of the aorta, yet the man had reached the age of sixty-two. In another case there was quite long life in spite of primary atheroma of the pulmonary artery. Atheroma is not so infrequent as has been thought. Curschmann has pointed out six cases under the age of twenty-five. Arterio-sclerosis has been known to occur in a girl of sixteen. Riesmann has recently published a case of calcification of the arteries of the abdomen of a child. There may be distinct atheroma of the aorta and yet no peripheral thickening of the arteries. There may be a sclerosed, tortuous, radial artery without any affection of the aorta. Curschmann insists that the arteries on both sides of the body should always be examined, for when there is arterio-sclerosis on one side it may not exist on the other. Edema of the lungs is not infrequently due to arterio-sclerosis. Localized sclerosis in the brain sometimes gives rise to peculiar symptoms. Other parts of the nervous system may suffer in the same way. Intermittent claudication may occur, that is, the patient may limp and at other times be able to walk straight, as the consequence of circulatory disturbances due to degeneration of the arteries of the nervous system or of special parts of the leg. Not infrequently in these cases a fatal termination comes as a consequence of gangrene, showing that there was also arterial degeneration in the affected limb itself.

Arterio-Sclerosis and Liver Sclerosis.—Dr. A. L. Benedict of Buffalo said that liver cirrhosis or sclerosis is much more dependent on degeneration of the arteries than has been thought. It is not alone the presence of the alcohol in the liver itself and its influence on the arteries with consequent disturbance of the general metabolism that initiates the sclerotic condition of the liver. The use of hot air baths has been forbidden in arterio-sclerosis, yet undoubtedly they help elimination and serve as a form of exercise for the excretory glands of the skin which must learn to bear their share of elimination owing to the sclerosis of internal organs.

Stokes-Adams Phenomenon.—Dr. Elsner of Syracuse, N. Y., said that the Stokes-Adams phenomenon is not so infrequent as has been thought and will be recognized by many practitioners who are on the lookout for it. The infrequent pulse of this affection may sink as low as twenty to thirty and be even slower than the respirations. The prognosis is not as bad as might be expected, for Dr. Elsner has known a patient to live

for twelve years after an attack of this kind, complicated by rather prolonged unconsciousness. In these cases there may be repeated apoplectiform attacks, yet without focal lesions. On the other hand such diseases may run a very rapid course. It is not as easy as has been thought to diagnose infrequent pulse. The sphygmograph tells the true story much better than the unaided finger. In this way, differences between the heart rhythm and the pulse rhythm that cannot be detected even by the phonendoscope may be revealed. Abortive systoles make their appearance in the sphygmographic tracings that give no indication to the palpating finger, or the listening ear. Dr. Elsner said that even when the arteries at the wrist show absolutely no changes there may still be attacks of true angina. It is wrong to assume because the palpable arteries are not thickened and tortuous that pains in the region of the heart are only due to pseudo angina and not to some change in the structures of the heart itself, or its supplying nerve. In erythromelalgia, the so-called Weir Mitchell's disease, recent observers have found evidence of changes in the arteries to the parts. Intermittent claudication is undoubtedly another sign of arterial degeneration. Usually, however, in these cases, the degenerative changes have proceeded to a very marked degree. Their progress may be very insidious and attention may not be called to the progress of the affection until very serious changes have taken place. The wonder often is that the condition is not detected before it is in these cases, since the arterial changes are so marked when the patient comes under observation.

Gastralgia and Arterial Degeneration.—Dr. Stewart said that exaggerated gastralgia is evidently quite often a sign of true arterial degeneration, though the heart and artery condition may not be suspected. A patient that had recently been under her care had suffered with intermittent recurring attacks of gastralgia for twenty years. Before his death, however, typical symptoms of true angina developed into which the gastralgia merged itself. The painful attacks were so severe that the patient frequently required a grain of morphine to give him any comfort. Toward the end, very curiously, these attacks occurred regularly every morning about two o'clock for several weeks.

Heredity and Arterio-Sclerosis.—Dr. James J. Walsh, of New York City, said that one element and a most important one in the etiology of arterio-sclerosis has not received the attention and discussion that it should. Heredity undoubtedly plays an important rôle in the development of arterio-sclerosis. Every physician knows of families, all the members of which die from precocious senility or as the result of the lowering of resistive vitality under or about fifty years of age. In these cases it is practically always the arteries that show the signs of the early degeneration and that give the hint of breaking up that is coming. In the prognosis of severe infectious diseases in patients, members of whose families have died about middle life or a little later it is well to remember that the prognosis is distinctly dependent on the family prognosis tendency to shortlivedness. To neglect this element in the case will frequently lead the doctor to give a favorable prognosis, when it is justified by all the circumstances of the case.

Acquired Slow Pulse.—Dr. Walsh said that cases of acquired slow pulse, or pulsus infrequens, are not so rare as is sometimes thought. He has a patient under observation whose pulse never rises above 40, in whom there seems every reason to think that the condition is acquired. She suffered from most of the diseases of childhood without her attention ever having been called to the fact that she had a slow pulse. In 1891, she suffered from a severe attack of grip during the con-

valence from which her physician called her attention to her slow pulse. Since then her pulse has under normal conditions been 36 to 38 per minute. The pulse corresponds exactly with the heart beat. She has been a theatrical dancer and has worked hard at other occupations without suffering any inconvenience. The use of atropine makes her heart beat somewhat faster, but this makes her more uncomfortable, rather than less. None of the other members of her family show any signs of the condition. When she catches cold the course of the slight infection is about the same as that of other suffering from the same condition.

Arterio-Sclerosis in the Young.—Dr. DeLancey, Rochester, in closing the discussion, said that arterio-sclerosis is by no means confined only to those advanced in years. He has seen examples of well-marked sclerosis in recent years, in patients who were respectively twenty-nine, thirty-one and thirty-eight years of age. In these cases the arterial degeneration was not confined to any one part, but involved practically all the palpable, peripheral arteries. With regard to arterio-sclerosis, localized to one area there are reports from the pathologists that show its occurrence not infrequently in young children, or in early youth.

Arterio-Sclerosis as a Mortality Factor.—Dr. Charles G. Stockton said that arterio-sclerosis does not occur frequently in the mortality records, because death comes to these patients usually not as a direct cause of their arterial condition, but from some secondary factor. Usually this intervening cause is one of the infectious fevers, as typhoid, or pneumonia. This obscures somewhat the importance of the condition. There is no doubt, however, in the minds of those who observe their cases carefully, that arterial degeneration is the most prominent factor in many deaths. It represents the element which is sometimes spoken of as what the patient takes into the disease with him. Needless to say arterial degeneration in a case of pneumonia is almost sure to lead to a fatal result.

Heredity and Localized Arterio-Sclerosis.—Dr. Thomas E. Satterthwaite said that heredity undoubtedly plays a very important rôle in the production of arterio-sclerosis, even when the arterial degeneration is very distinctly limited in the area which it affects. It may be a family trait to have early degeneration of a single cerebral artery like the Sylvian. It is undoubtedly because of this that apoplexy occurs in certain families at a comparatively early age and in different members of almost exactly the same age. Another hereditary degeneration of arteries occurs at the base of the brain. Some of the anomalous cases of hemorrhage after slight trauma are undoubtedly due to arterial degeneration affecting the important vessels situated here.

Treatment.—The iodides by clinical consensus do accomplish much for arterial degeneration. They must be used, however, for long periods. For months or even for years. The iodides alone, if used for such long periods, may prove depressant. Combinations of the remedy, however, with iron or arsenic may do away with this undesirable effect. Iodides of arsenic or of iron may be used for long periods in these cases without harm and with excellent effect. Dr. Satterthwaite said that hot air has been spoken of as a possible remedy in these cases, but his own experience with this agent, which has been rather extensive, would not lead him to make much use of it. It makes patients very irritable and not infrequently causes an insomnia which is extremely difficult to overcome.

Teaching Phlebotomy.—Dr. Thomas Manley of New York said that unfortunately venesection has fallen into a desuetude that is not entirely innocuous. Very

often physicians hesitate to perform venesection because they have never seen the operation done. It is humiliating to see the recent graduates of even distinguished medical schools blunder around in trying to open a vein in the patient's arm. There should be a distinct teaching of the method and technic of phlebotomy, since there are certain conditions in which the operation must be done, and when needed as a rule there should be no hesitation about its employment, since the conditions for which it does good are serious and delay is dangerous.

Hepatic Ballottement.—Dr. A. L. Benedict of Buffalo demonstrated the technic of a diagnostic method by which the size, shape and consistency of the liver can be felt with much more assurance than by the ordinary method. The demonstration was made upon an individual whose ribs were not as yet calcified. The method consists in producing an up and down motion with the ulnar surface and the finger ends of both hands so that penetration deeper into the abdomen is secured and the liver is made to move. The principle underlying the method is that it is easier to feel and outline a moving body when covered than one absolutely at rest. By this method the exact location of the lower border of the liver can be shown rather easily and with satisfaction to the examiner.

THIRD DAY—THURSDAY, JANUARY 29TH.

X-rays in Cancer of the Cervix.—Dr. Thomas S. Scully of Rome, New York, said that our present treatment of cancer of the cervix uteri is rather discouraging. If found at an early stage, and complete hysterectomy is done there is some hope of saving the patient's life. Nothing short of hysterectomy, however, gives the patient any hope. In later stages it is recognized that the cases are practically hopeless. Even under the most favorable circumstances, however, complete hysterectomy is followed by an alarming number of recurrences with fatal results. Surgeons would welcome any additional treatment that would give promise of lessening the awful mortality from the disease. The first case that came under Dr. Scully's attention after he had resolved to employ the X-rays was a so-called cauliflower growth of the cervix. A metal shield was used at first but this produces electrical induction difficulties and is liable to cause local irritation. After the first employment of the X-rays, the patient began to improve and the growth gradually sloughed away. The tendency to hemorrhage ceased after a few applications and other parts of the growth began to shrivel up. After a number of applications the woman felt so well that, as she was summoned to a distance by her daughter's confinement and serious illness, she gave up treatment and has written that she considers herself cured. In the second case in which Dr. Scully employed them the X-rays at once gave relief from pain in urination and relieved the discomfort which had existed for a long time. There had been a very offensive discharge which began to diminish at once and ceased entirely in a few weeks. Now, as the result of some fifteen applications of the X-rays the cervix is practically obliterated, the patient has gained in weight, the ulcerating parts are healed over except at one portion of the posterior vaginal vault and the outlook is most promising. The patient herself is very well satisfied with the results obtained and there seems every reason to think that the local condition at least has been obliterated. All cases treated have been benefited. Dr. Scully then considered that while the present knowledge of the X-rays does not justify the putting off of operation in cases where the disease has not advanced very far, the X-rays should be employed in most cases of cervical

cancer. In advanced cases, where palliative operations are employed, this method should be considered afterward and even after hysterectomy. Treatment by the X-rays may prevent development of recurrences.

Dr. Frederic C. Curtis of Albany said that the X-rays should certainly be tried in all cutaneous epitheliomata. So far they have given excellent results. There is no doubt also that with proper technic they will prove of service for cancer in other parts of the body. Their availability is only just beginning to be realized.

Cicatricial Contraction of Elbow.—Dr. A. H. Traver of Albany reported a case in which a patient suffered from cicatricial contraction at the elbow as the result of a burn from boiling oil at the age of four years. The cicatrices have been cut at the elbow but contraction has taken place subsequently. Dr. Traver raised a flap from the chest which was applied to the elbow, and later for the wrist he raised a flap from the thigh. In these cases the ends of the flaps were allowed to remain adherent to their original location, until secondary adhesions to the denuded portions of the arm were secured. Skin flaps were applied over other granulating surfaces. As a result, the arm has been made straight and is available for most purposes, though almost immobile before.

PHILADELPHIA OBSTETRICAL SOCIETY.

Stated Meeting, Dec. 4, 1902.

The President, Dr. John M. Fisher, in the Chair.

On the Labia Urethrae and Skene's Glands.—Dr. Howard A. Kelly, of Baltimore, said that under the term labia urethrae there was a well-defined important anatomical structure which has hitherto escaped the attention of clinicians. These labia consist, not in the rounded margins of the external urethral orifice which have been termed labia erroneously, but in well-defined lips or labia which project from two to four millimeters beyond the external meatus and by their mutual approximation cover and protect the orifice from the bacterial flora constantly bathing the vulva. If a trivalve speculum is introduced into the vagina and the blades separated the labia urethrae are also separated and the urethra is exposed.

They also exercise the physiological function during coitus of protecting the urethral orifice. Sometimes these labia project beyond the urethral orifice on either side like long elephant ears, much more conspicuous relatively than the labia minora in relation to the vaginal outlet. Sometimes they are long and narrow. In other instances one lip is long and the other short. The margin is generally an even one or slightly crenated. In one case a fimbriated margin was found. They disappear with age and with mechanical insults.

Skene's glands lie just within the urethra at the bases of these labia. The function of these glands is clearly to moisten the urethral labia, particularly during coitus during the violent displacement of the labia with the urethral orifice up into the vagina when the labia urethrae need constant lubrication to obviate the injurious effects of attrition; in this way they occupy a position relative to the urethral orifice corresponding to Bartholin's glands in their relation to the vaginal orifice.

Disease.—Their affections are catarrhal or gonorrheal. The speaker cited one case which was possibly a cyst of the left gland due to a closed duct. They may be treated by injection, incision or excision. In order to inject them Dr. Kelly showed a little syringe which fully met all the requirements, consisting in a delicate blunt pointed cannula about five cm. long and one mm. in diameter, a piece of simple rubber tubing drawn over

the end of the larger cannula after closing the open end, then made an excellent syringe, serving by the elasticity of the walls of the tubing to draw a few drops of fluid up the cannula. With a simple syringe of this sort the amount of fluid injected was also fully under control. After citing a number of cases treated by injection and by excision, Dr. Kelly referred to an interesting case in the hands of Dr. Hunner, his associate, in which smegma bacilli were found in the abundant secretion from one of these glands, showing how readily a tuberculosis of the urinary tract might have been inferred even though the vulva had been cleansed before the patient passed her water.

Dr. R. C. Norris said that all, of course, have been more or less watchful of Skene's glands just as they had learned to be of Bartholin's glands to enable one to make a diagnosis and not to overlook any case supposed to be gonorrheal. It is his own practice to look for the so-called gonorrheal maculae of Sanger in Bartholin's glands and for a similar appearance in Skene's glands to aid in a snap diagnosis, as it were, of gonorrheal infection, later to be studied more accurately by bacteriological investigation.

The description of the labiae of the urethra given by Dr. Kelly has been exceedingly interesting. He was sorry he did not go into the microscopical study of their anatomical structure. It is frequently noted that women who have borne many children have a puffy, red, swollen and sometimes eroded area at the orifice of the urethra, which, however, produces no pain and is not associated with the characteristic symptoms of caruncle. He had wondered whether or not these folds have anything in their microscopical structure to throw light upon the difference between the exquisitely painful caruncle and the erosion or vascularity above referred to which is unassociated with pain. Dr. Kelly no doubt has had sections of these labiae made, and it would be interesting to know his results. Furthermore, with his larger experience in the study of these cases and his work in the urethral tract, he would like to ask whether, in addition to the silver preparations and carbolic acid named, he has used any of the newer silver salts supposed to be of peculiar value in the treatment of gonorrhea. With the small area to be attacked and the results obtained so readily studied it would seem to be an excellent opportunity to test thoroughly these newer preparations. He had been making use of them in gonorrheal cases but his observations had not been sufficient to draw definite conclusions. He thought that no man had done his whole duty in studying a suspected gonorrheal case until Skene's and Bartholin's glands had been accurately studied. Dr. Kelly's remarks are also of much interest concerning the macroscopic appearances of Skene's ducts and the delicate sense of touch which enables one to find these ducts. These facts should be of use to the general practitioner who has neither the time, knowledge nor the facilities, to study the condition bacteriologically.

Dr. John C. Da Costa said that for him it had been a problem how to inject Skene's glands. He had Dr. Kelly show how. In two cases had within a week, he would have liked very much to have injected the glands. He took a rough and ready mode of cleaning them out. It was very simple, taking a small triangular probe with sharp edges inserting it into the glands, by twisting it around he hoped to set up an inflammation and thus extinguish them. Both had been cases of gonorrhea.

Dr. Kelly in closing said he would that the gentlemen would do him the favor of giving close attention to the anatomical structures he had described. Do not draw conclusions from the first two or three women examined. The best defined urethral labia will be found in younger

women where the vaginal orifice is relatively intact. He had not yet been able to make microscopical examination of these structures, as he would not be justified in cutting off the tissues in the living patient, and he had not been able to secure a recent cadaver. He would expect that they would be much like the hymen in structure as they seem to form a part of the hymenial system.

Dr. O. H. Allis said he was especially interested in one point, the point that Professor Dickson used to speak of, that all physicians should wear gloves, and that their hands should be kept very delicate and very sensitive. For many years when he had been at the seashore he had amused himself with washing his hands with the sand and had found how thoroughly it took off the outer coat, the tough and corneal portion. He likes to wash his hands with sand about once a week. It is an ordinary experience for a surgeon to have some one see him who has a foreign body in some part; like a needle that has been run into a child's limb. Unless the fingers are very delicate they are apt to not detect it. When Dr. Kelly said he could feel these little ridges with his finger he took it for granted that he either wears gloves or washes his hands with sand once a week or perhaps every day, or perhaps he has an exceedingly delicate skin. He said he shook hands with some surgeons and he would think they worked on the road with the pick. His own hand, although he had not done any hard work for years, is dry as a chip and has a tendency to a corneal surface.

The nitrate of silver has been so satisfactory in varying solutions that although he had occasionally tried the other preparations, he had gone back to it, and he did not feel justified in making experiments. He was waiting for other clinics, especially the men's genito-urinary, to settle the relative value of the silver salts. In giving massage to the urethra and the glands he makes a glove for his finger by wetting a thin layer of cotton and then applying it like a little cap over the last joint of the finger which in this way protects the skin and tissues. Sanger in agreement with Dr. Allis is emphatic as to the value of sand in keeping the hands fair, soft and clean, and Kroenig in Leipsic says that it is one of the best agents in removing the epithelial roughness always found on the hands of those using bichloride of mercury.

THE HARVARD MEDICAL SOCIETY OF NEW YORK CITY.

Regular Monthly Meeting, held Saturday, December 27, 1902.

The President, William B. Coley, M.D., in the Chair.

A New Method of Correcting Flexion Deformity at the Knee.—The scientific business of the evening was opened with a paper by Dr. Royal Whitman who said that there is no deformity which is more difficult of correction than this. There is often a condition of complete backward dislocation complicating the flexion. Correction is followed by displacement of the joint surfaces of bones in such a way as to produce a turning of the condyles of the femur, or the production of a condition of subluxation, or of unstable equilibrium of joint surfaces so that dislocation easily occurs. Besides if the flexion deformity has continued for some time, there is apt to be shortening of the flexor muscles which makes straightening of the limb extremely difficult and also the inner condyle of the femur, because of the absence of a counter pressure at the head of the tibia becomes deformed. Hence the difficulties in correcting the flexion and the frequent occurrence of subsequent operative subluxation.

Backward Dislocation.—Dr. Whitman exhibited an X-ray photograph which a physician had recently sent to the Vanderbilt clinic. In treating a patient suffering from flexion at the knee the doctor had divided the hamstrings and then forced the limb into a straight position. The result had been a backward displacement that was deforming and the X-rays showed very clearly the malposition of the joint surfaces. The physician wrote to ask why he had failed. In these cases even considerable traction does not succeed in overcoming this tendency to backward dislocation.

New Technic.—Usually in correcting the deformity, the patient lying on the table, the end of the femur is the fixed point and the tibia is used as a lever. Dr. Whitman, during his recent service at the New York Hospital for Ruptured and Crippled, thought that it might be well to attempt correction in just the opposite way, using the femur as a lever and having the head of the tibia as a fixed point. This can be accomplished by putting the child face down on the table and holding the head of the tibia firmly in position on the table, pillows being employed so as to make the child's position comfortable with the femur in the deformed position. Before attempting much leverage thorough massage of the hamstrings is done. As soon as the deformity is corrected the tendency to knock-knee may be overcome forcibly. Instead of applying force all at once alternate tension and relaxation of the contracted muscle is employed and massage judiciously applied to secure muscle stretching. While ordinarily the pain after correction of flexion deformity of the knee is very great, after this method of treatment the discomfort is very slight or there is no complaint at all, if the limb is fixed in the corrected position in a plaster bandage. The pain would seem to be due to mobility and to the pressure produced by effusion and if these two factors are overcome by a carefully applied plaster bandage the result is greatly to the comfort of the patient. Where it is impossible to straighten the limb by this means osteotomy of the femur above the joint may be done and then a range of motion secured at the point of greatest usefulness.

Dr. Whitman considers that this method of treatment may be useful not only in cases of flexion at the knee-joint that occur as a consequence of pathological conditions in children, but also deformities that arise from infectious processes in adults, as gonorrheal arthritis, or typhoid arthritis.

In discussing Dr. Whitman's paper Dr. Cilley said that he has seen Dr. Whitman's method in actual practice at the Hospital for Ruptured and Crippled and it undoubtedly gives better results than any method that has thus far been employed. The ultimate results are as yet not known, but there seems no difficulty in retaining the limbs in their proper positions after the manipulation.

Children that come back seem not to have suffered much discomfort during the course of the treatment and their conditions are very satisfactory.

In answer to the question, Dr. Whitman said that of course the reposition of the limb to its straight condition is only a preliminary to the after-treatment which by proper fixation must secure the permanency of the good position.

Acute Mastitis in Typhoid Fever.—Dr. Charles Schramm said that he wished to report a unique sequel to typhoid fever which very rarely occurs and which he himself had never seen before. The disease was of a mild type without any unusual features and during convalescence when the temperature had already been for over a week perfectly normal an acute mastitis developed. The patient was a young woman

of thirty, married who had had one child and there seemed to be no reason for the localization of the typhoid bacillus in the situation which it took up. At first there was very little pain with the pathological condition and the patient's attention was attracted by an enlargement of the breast. In two weeks the right breast was twice the size of the left. The axillary glands were recognizable, though but very slightly enlarged and were not tender. The breast became quite adherent to the muscle underneath and there was a tense hard feeling that in connection with the immobility might easily have been thought to indicate malignant disease, if the circumstances of the patient and her history were not well known to the physician. On deep incision about two tablespoonfuls of pus were evacuated in which a pure culture of typhoid bacilli was found. The abscess developed at a time when the patient was running an afebrile course and during the enlargement of the breast until the actual formation of pus no temperature was noted. With the history of typhoid it seemed clear at once what the pathological condition present must be. But in ordinary surgical work, without a definite history or if the latency of the bacillary action was prolonged for several months instead of several weeks, there might be some difficulty in differentiating the condition from true malignant disease.

Fractured Spines.—Dr. Royal Whitman said that it is the custom to make a diagnosis of fracture of the spine only when the fracture is complete and when a portion of displaced bone, pressing upon the spinal cord causes paralysis. Personally he is of the opinion, however, that many more fractures of the spine occur, than are usually diagnosed. In a recent case under his care a child had evidently suffered a fracture of the spine as the result of an accident. The little patient fell three stories and was taken to a hospital. Careful examination seemed to show no fracture or dislocation in the limbs and though the child complained considerably of its back, its general condition was so good that after three days it was sent home. It did not get better and a marked bending forward of the upper part of the spine with a prominence in the dorsal region developed. Dr. Whitman found evidence of fracture of the spine and succeeded at the end of three weeks in straightening it and putting it into a plaster dressing. This manipulation would have been much more easily accomplished immediately after the accident than three weeks later, but the difficulty is that surgeons have not yet grown accustomed to looking for and recognizing fractures of the spine that do not cause paralysis.

Illustrative Case.—In another patient who has been under Dr. Whitman's care the man fell twenty feet and was pronounced to have no fracture or dislocation. He remained in bed for ten days and when he got up was quite bent over. As time went on his deformity increased. Later a certain tendency to rheumatic arthritis with ankylosis of the vertebrae occurred. This caused some difficulty of breathing. It seemed clear that the callus formation set up in the broken vertebra had stimulated the throwing out of other pathological bony material that led to a sort of traumatic arthritis deformans. The patient was straightened over a table and realizing that with the perfectly straight lumbar spine and a straight back walking would be impossible, a certain amount of bending forward of the lumbar spine was accomplished at the same time. It seems clear in many cases that the round shoulders and forward projection of the head and upper part of the body are really part of a compensatory curve of the spine to make up for the absence of a curve in the lumbar region. While this forcible straightening of

spines affected by arthritis deformans has in some cases given rise to serious nervous sequelæ, in the present case the results were all that could be desired. During the straightening process the arms were pulled very vigorously and as a consequence there was for a time after the operation some atrophy of the arm muscles. This improved rapidly and has now completely disappeared. A year after the operation the man was four inches taller and his shortness of breath had entirely disappeared. The patient himself felt that he had been quite made over. He has gone back to his ordinary work and is very well satisfied.

Expectant Treatment in Fracture of the Spine.

Dr. William B. Coley gave the details of a case recently under his care in which a patient nineteen years of age, had, while picking apples, fallen some twenty feet with a resultant fracture of the spine. In the lower dorsal region definite crepitus could be felt and besides the paralysis of the legs there was absolute paralysis of the bladder and rectum. The case seemed very unfavorable and in consultation with a prominent neurologist it was decided not to operate. The patient was put on a water bed and in six weeks had regained most of his power of movement. After two months he could move around quietly as well as ever. If an operation had been performed it would have been considered to have saved the patient's life. It is evident, however, in these cases that conservatism and expectant treatment may be the best plan at times.

Peculiar Spina Bifida.—Dr. Eugene Fuller reported a case in which a man having acquired gonorrhea seemed to have developed an abscess in the perineal region. Careful examination, however, showed that much of the secretion did not come from the subcutaneous abscess cavity, but from a considerable distance back in the perineum and even beyond the anus. There proved to be a canal extending from the end of the spine down into the perineal region. The danger of his condition was represented to the patient, but he refused to permit any radical operation. He is still under treatment and there seem to be no special complications as a consequence of the anomalous tissue conditions.

Broncho-pneumonia and Malaria.—Dr. Potter said that it is not considered possible as a rule to mistake malaria for broncho-pneumonia, nor to find evidences of lung involvement as a consequence of malaria. In two cases recently, however, he has seen conditions due evidently to malaria, simulating broncho-pneumonia so closely as to make differentiation extremely difficult until the demonstration of the malarial parasite cleared up the diagnosis. These cases are all the more interesting as, of late years, the old malarial pneumonia that used to occupy a prominent place in the text-books and in medical literature has practically disappeared. In the first case the patient was a boy of eleven years, who had suffered from malaria four or five years ago. He was suddenly attacked by fever followed by some cough and considerable prostration. The temperature rose to 102° F. and while there were very few physical signs there seemed to be enough at the base of one lung to suggest some broncho-pneumonia. There was in addition a distinct bronchitis. On the next day the patient was apparently well, the temperature dropped below 100° F., the child was happy and hungry and the signs in the lungs had cleared up considerably. On the third day, however, the temperature was once more high, above 103° F., and there was considerable disturbance of the circulation with marked cyanosis of the lips. At this time there were some further symptoms at the left base, slight dulness with broncho-vesicular murmur. The spleen was enlarged. A count of the

leucocytes showed twelve thousand, but there were no malarial parasites to be found. There was another interval on the fourth day in which the patient once more returned nearly to normal healthy condition, while on the fifth day there was a third exacerbation of symptoms. No malarial parasites could be found but the clinical course of the case, seemed to justify the use of quinine and once it had been prescribed, there were no further rises in temperature and the signs in the lungs promptly cleared up without more ado.

The second patient was a young man of twenty-nine years, born in New York City, who had always lived there, who had been hurt on the head at the age of five and was described by his friends as not strong in his mind ever since. As a growing boy he had lived in a malarial region and had suffered several times from malaria. The first specially noteworthy symptom in his case was a marked comatose condition, as a consequence of which he neglected to empty his bladder, or say anything about it; when it was noticed, some forty ounces of urine were removed with the catheter. The resident hospital staff found distinct signs of broncho-pneumonia and this was the diagnosis of the case. The lethargy, however, seemed to be much more pronounced than should be the case, if the pulmonary condition were the only basis for his symptoms.

Other Diagnostic Signs.—Careful examination showed the presence of an enlarged spleen, which was rather hard in consistency though only moderately tender. The patient's condition of apathy might, however, count for lack of complaint on deep pressure. The left lung was dull below the scapula and there was broncho-vesicular breathing with fine crepitant sounds at the end of expiration. There was a herpes in the moustache and at the nasal angle on the left side. Examination of the blood showed the presence of a few malarial parasites. The patient was given quinine and the condition promptly cleared up. In 24 hours no signs of broncho-pneumonia were left in the lung. The patient's apathy disappeared completely at the same time.

Differential Diagnosis.—The question of the differential diagnosis of malaria and broncho-pneumonia may not seem very important and yet at times it may prove difficult of decision. In answer to a question as to the pathological basis of the physical signs found in the lungs Dr. Potter said that in cases of pernicious malaria in which there had been severe cerebral symptoms Italian pathologists, specialists in malaria, had found a massing of malarial parasites in certain parts of the circulation of the brain. This caused a disturbance of circulation with consequent symptoms in the same way it would seem that malarial parasites may occasionally become massed in the arteries of the lungs and produce symptoms of consolidation.

Latent Malaria.—Dr. Daniels said that with regard to the diagnosis of malaria he is personally very hesitant unless he finds the malarial parasite. Malaria may be present but the clinical course of the case alone is not sufficient to justify a definite diagnosis. Many cases clear up as the result of the tonic influence of quinine without necessarily being malarial in origin. Pneumonia often runs a very irregular course and especially in children may abort or come to a crisis on the third or fourth day. The question of malarial organisms being present in the system for many years without producing any symptoms and then suddenly causing renewed attacks of malaria, seems to Dr. Daniels very doubtful.

Pneumonia Erratic in Children.—Dr. Schramm said that pneumonia in children is particularly apt

to run a very erratic course. If there are signs of pneumonia then that happen to clear up shortly after the administration of a certain amount of quinine, this can scarcely be considered a proof of the malarial origin of the affection, since the malaria might very well have cleared up of itself. With regard to the latency of malaria, Dr. Schramm feels that the organisms may remain in the system absolutely without the production of symptoms for many years, their habitat seems to be the spleen or the bone marrow. Just how they maintain themselves without the production of symptoms and why they are sometimes carried out into the blood stream once more to produce their usual effects, while at other times they remain dormant, is not clearly known.

Broncho-pneumonia and Malaria.—Dr. Follen Cabot said there is no good reason for not thinking that broncho-pneumonia and malaria may run their course together. It may even happen that in a patient suffering from broncho-pneumonia who has previously had malaria and as a consequence has malarial organisms stored away in his spleen that the disturbance of the system by the fever and respiration difficulty may by lowering resistive vitality produce a condition favorable for the plentiful reduplication of the malarial parasites with the production of true malarial symptoms in addition to the broncho-pneumonia. In children the course of pneumonia of any kind, and especially of broncho-pneumonia is so variable that sudden changes for the better can scarcely be attributed with any assurance to any remedy administered shortly before. Dr. Potter said in closing the discussion that in the latter case the discovery of the malarial organism and the prompt disappearance of all the symptoms under the administration of quinine seemed to place beyond all doubt the diagnosis of malaria. In the child the clinical course of the case seemed amply to justify the same conclusion. Broncho-pneumonia does often run a very irregular course in children and sometimes clears up most unexpectedly. Broncho-pneumonia does not, however, give six to eight hours of fever and acute discomfort followed by an interval of about forty hours of comparative comfort and this by another spell of six to eight hours of temperature with another forty-hour period of relief and a third exacerbation. Between the times of febrile temperature the child was happy and hungry and played around freely on the bed as far as was permitted, which would be just the condition of affairs in malaria and would not at all occur if the case were true pneumonia.

Discovery of Malarial Organisms.—Dr. Potter said that it is often extremely difficult to discover malarial organisms. Just why this difficulty occurs is not known. At times the parasites seem not to be in the peripheral circulation at all, but only in certain parts of the internal circulation, where they cause the symptoms. Five or six negative examinations by no means exclude the diagnosis of malaria. Every microscopical diagnostician of experience has had cases in which after repeated failures the malarial organisms were subsequently found.

Dr. Ogden said that a large experience in looking for malarial organisms had taught him that failure to find the micro-organisms in several examinations is no sure index to the absence of malaria. The parasites are frequently not found in the first examinations, especially in estivo-autumnal fever.

Abolition of Board of Coroners.—Dr. Brannen moved that a committee be appointed to further the present movement with regard to the abolition of the Board of Coroners in New York County. This subject has been taken up by other medical societies and

the weight and influence of the Harvard Medical Society should be lent to the movement. Dr. Brannen said that ten years ago an effort was made to do away with the coroner's office in New York, but it was found to be a constitutional office and hence could not be abolished. Under the new constitution, however, this is no longer the case. Erie County has recently had a bill passed doing away with coroners and the new system is a source of congratulation in Massachusetts, the abolition of the old coroner system and the creation of a Board of Medical Recorders has given excellent satisfaction. The material that now passes through the coroner's hands is used in Boston in various ways for teaching purposes and the physicians who make autopsies have published a series of excellent papers with regard to very practical medico-legal points involved in the case. Dr. Brannen's resolution was adopted unanimously.

NORTHWEST MEDICAL SOCIETY OF PHILADELPHIA.

Regular Meeting, Dec. 2, 1902.

The President, Wendell Reber, M.D., in the Chair.

Rheumatic Tonsillitis in Children.—This was the title of a paper read by Dr. John Stewart. The author divided tonsillitis into two classes, catarrhal and rheumatic, and stated that while many writers asserted the condition was confined to the membranous portion of the glands many cases had come under his observation which had involved the entire gland. The disease may occur at any age, although most frequent in children between five and fifteen years of age; the attacks are usually recurrent, with a varying length of time intervening; oftentimes there is a family predisposition to the disease. The disease is frequently accompanied by muscular and articular rheumatism, especially the latter, and may partake of the nature of an epidemic, more particular in the fall of the year during the rapid changes in the weather. It is generally due to a rheumatic poison in the circulation, but chronically enlarged tonsils are very apt to assume this state upon the slightest provocation, such as exposure to cold, wet, etc. The paper will be given in full in the MEDICAL NEWS.

Dr. William L. Pepper felt that there were but few cases of true rheumatic tonsillitis occurring in children, the majority of cases of tonsillitis being caused in his opinion by the formation of lactic acid in the stomach, which upon its absorption by the tonsils produced inflammation. For the treatment of the disease local applications of peroxide of hydrogen which tends to antisepticize and oxidize the parts and thus prevent the absorption of germ excretion, biniodide of mercury and in the beginning stages of the disease free purgation by the use of one-tenth of a grain of calomel every five minutes until one grain is given were recommended.

Dr. A. B. Kirkpatrick remarked that he believed the large majority of cases of tonsillitis were caused by some infection, which is particularly apt to occur when the organs are enlarged and adenoid tissue is present, and that in his experience but very few cases of the true rheumatic variety had been observed in children. One reason for this being the fact that children are not as a rule excessive meat eaters, which has somewhat of a tendency to the production of a rheumatic diathesis. In those cases in which there is a history of a family predisposition to a rheumatic or uric acid diathesis, the condition would be more likely to occur. The usual symptoms of elevated temperature, malaise, chilly feeling, etc., are present no matter what the source of the infection, and frequently in a child with enlarged tonsils

a slight cold will cause an onset of an attack of the disease. Many of the cases which are due to indigestion will yield in from 24 to 28 hours to treatment with calomel, phenacetin and bicarbonate of soda, and if there is enlargement of the submaxillary or sublingual gland local applications of ice will be of value. Ammoniated tincture of guaiac, iron and chloride of potash were felt to be of little if any value and the former in addition to being of little if any benefit to the disease was very apt to produce a disordered digestion. In rheumatic tonsillitis, biniodide of mercury and the salicylates were recommended and in cases of abscess formation local applications of peroxide of hydrogen were thought to be of value.

Dr. Harry Lowenburg said that in the several cases of follicular tonsillitis on which he had used biniodide of mercury the results had not been very satisfactory. In regard to the diagnosis of rheumatic tonsillitis he felt that it would be difficult to be certain of this fact unless there was a family or previous personal history of a rheumatic condition, which in the case of children he thought was more frequently manifested in the shape of growing pains than in cases of acute articular rheumatism.

Dr. Frank C. Hammond felt that salicylate of strontium was of more value than either salicylic acid or salicylate of soda as it could be administered in large doses without any untoward results.

Dr. Carle Lee Felt stated that he agreed with the previous speaker that it was not possible to be sure of the diagnosis of rheumatic tonsillitis, without a previous history of rheumatism. For the treatment of the infectious variety of the disease, local applications were felt to be of value, but in rheumatic tonsillitis, it was recommended that they be strenuously avoided. Calomel, sodium salicylate and benzoate of soda, were recommended and the opinion expressed that many cases if left alone would get well of their own volition in seven or eight days. Where there is a bluish appearance of the throat, with considerable pain, no membrane and very little, if any swelling, it was thought to indicate rheumatic tonsillitis, and the condition was thought to be aggravated by excessive meat diet, coffee, tobacco or alcohol.

Dr. Samuel Wolfe said that he believed that there were very few cases of true rheumatic tonsillitis in which suppuration was present, those cases being usually produced by infection. Rheumatic conditions of the throat he believed were more apt to attack the pharynx than the tonsils, thus following the rule in other parts of the body that rheumatism is more apt to attack the fibrous portions. The rheumatic variety is usually associated with other rheumatic symptoms in various parts of the body, on inspection there is usually very little if any inflammation, but a great amount of pain, which is decidedly intermittent, and the duration may be for a variable length of time. For the treatment of the rheumatic variety salicylates were recommended as a means of checking the disease for a time and in some cases will probably effect a cure, but as a rule the constitutional seat of the disease must be acted upon by some other remedy. Where there is an inflammatory phlegmonous or catarrhal condition, guaiac and the early application of ice, externally and internally were recommended.

Dr. Samuel P. Gerhard felt that the term rheumatic tonsillitis was rather a misnomer, except in cases where there was a history of rheumatic diathesis, and stated that in cases where the tonsils were enlarged and inflamed he had obtained good results from the application of adrenalin, administered hypodermatically, if the tonsil is very large and patient will not have it excised.

Dr. William H. Good referred to the cases of two

brothers who both have a history of gout, one has purpura of the rheumatic type and usually suffers from a bad attack of migraine two or three times a year, the other has rheumatic symptoms and usually has quinsy once or twice a year, and suggested the possibility of some connection between the quinsy and the rheumatic symptoms.

Dr. Wendell Reber stated that he believed the reason children so seldom suffered from rheumatic tonsillitis was the fact that they were out in the open air so much, rather than the restriction of their diet in reference to meat. In regard to the use of biniodide of mercury he related the case of a man, and several of children who had suffered from tonsillitis without suppuration, in each case the salicylates and biniodide of mercury being administered, and in every case the patient suffered in a few weeks after recovering from the attack of tonsillitis with paralysis of the muscles of accommodation.

Dr. Stewart in closing stated that all the cases upon which his paper was based had been cases in which the parents gave a history of a distinct rheumatic diathesis, and even although suppuration had existed in some of them he believed them to be of the true rheumatic variety. In regard to the ammoniated tincture of guaiac producing gastric disturbance, he felt that that could be avoided by giving it in connection with some other palliative substance. In regard to the use of adrenalin, he felt that was a temporary means of reducing very large tonsils; it was of great value particularly in conjunction with a ten-per-cent. solution of antipyrin, but that the result would not continue for more than five or six hours and would need to be repeated.

The discussion was opened by Dr. Wilmer Krusen who recommended a bimanual examination of all patients prior to the operation for pelvic disorders, which can be easily accomplished in the case of a thin woman, but in a woman with very thick abdominal walls, it is usually necessary to employ an anesthetic. Tight lacing and other causes forcing the intestines down below their normal position is responsible for many abnormal pelvic conditions, and also increases the danger of inadvertently cutting through some structure during the operation. A case was reported of a girl, seventeen years old, who had been suffering from nocturnal incontinency of the urine, caused by retroversion of the uterus and consequent pressure on the bladder, making it impossible for the latter organ to distend to any degree. Administration of bromide of ethyl and a relaxation of the parts resulted in the cure of the condition. In regard to operations on the round ligament, Alexander's operation was thought to be indicated only in those cases where there were posterior adhesions, the objections to it being the necessity for two incisions, and the consequent likelihood of double infection, and also the fact that it is made in the weakest part of the abdominal wall. The operation of ventrosuspension should only be done in cases where it is absolutely certain that pregnancy will not subsequently occur.

Dr. Frank C. Hammond commented on that fact that the modern method in appendicitis was to separate the oblique muscles rather than go through the abdominal wall, thus being much less favorable to hernia. In regard to drainage, vaginal drainage was thought to be preferable to drainage through the abdominal wound, as this does not interfere with closure of the incision at once.

The value of a bimanual examination of the rectum in all cases of pelvic disorder was commented upon, and this should be made in conjunction with the pelvic examination. Attention was called to the method pursued by Dr. Kelly of Baltimore, when he intends to do an ex-

tensive dissection, of inserting a flexible sheath in the ureter in order that he may easily trace out its course, and thus avoid injuring it.

In closing Dr. Thomas remarked on the fact of Alexander's operation being considered not a good one because it was a "blind operation." The gridiron incision for appendiceal operations was thought to be all right when not too much room was required.

THE MEDICAL ASSOCIATION OF THE GREATER CITY OF NEW YORK.

Annual Meeting, held at the New York Academy of Medicine, January 12, 1903.

The President, Andrew H. Smith, M.D., in the Chair.

Election of Officers.—Dr. Ransford E. Van Gieson, Brooklyn, was elected Vice-President; Dr. P. Brynberg Porter, Manhattan, Recording Secretary, and Dr. Arthur C. Brush, Brooklyn, Chairman for the Borough of Brooklyn.

The Treatment of Uremia.—Dr. William H. Thomson made the address of the evening on this subject. In the kidney, he said, experimental pathology has given us a strange paradox: The more you remove these organs, the more, apparently, will they excrete. Bradford found in dogs that if two-thirds were cut away, the animals lived on very well, and that they passed both more urine and more urea than before the operation. If, however, only one-fourth of the organs was allowed to remain, they lived for some time, though dying eventually. But as long as they survived, there was marked polyuria and increased excretion of urea; the muscles disintegrating into urea and so passing off by the kidney. It would seem, therefore, that a small part were greater than the whole. In explanation of the polyuria it is claimed that the glomeruli of the kidney are capable of draining off the entire serum of the blood, and would do so if the fluid were not re-absorbed. In cirrhotic kidney there is almost always considerable polyuria, and this is explained by the destruction of an extensive surface for absorption. The physiology of the kidneys is still imperfectly understood, and hence their pathology must be more or less uncertain; but clinical experience furnishes us with considerable definite information, so that the special conditions in different diseases of these organs can be recognized.

Obstructive Suppression of Urine.—Thus, instances occur in which persons apparently in good health suddenly find themselves unable to pass a drop of urine. Here there is obstructive suppression, and the cases are peculiar and distinctive. Some time ago he was called in consultation to see a healthy-looking German who had not passed a drop of water for eight days. The man was sitting up, and stated that, except for feeling weak, he would not know that he was ill. When the attending physician was first called, eight days before, the only thing abnormal he noticed about the patient was some contraction of the pupils. The pulse was not especially tense, and there was no headache or any other of the ordinary symptoms which might have been expected. It was found that thirteen years before, the patient had been attacked with severe pain in the left flank and with high fever. After the fever subsided he found that he could not pass his water. The pain he described as of exactly the same character as that which preceded the present suppression. The only hope for the patient was to operate immediately, cutting down upon the ureter, which was unquestionably choked by a calculus. From the history it was evident that the left kidney had been obliterated by an obstructive stone, or stones, thirteen years before; so that he had only one kidney left. The attending physician asked why symptoms of uremia were

not present, and Dr. Thomson told him that unless operated upon the patient would die, from simple asthenia, without a symptom. The operation was declined and two days afterward the man died in the manner mentioned. In uremia the condition is wholly unlike that seen in cases where the urine has been suddenly and completely suppressed. A careful study of uremia suggests the presence of more than one poison to produce the different symptoms noted; each having its peculiar and characteristic effects. He referred to one of these particularly, and to illustrate its manner of action he related the case of a lady sixty-two years of age. When rising from the table on one occasion, she was seized with a faint feeling, and fell to the floor. Placed in bed, she suffered from great restlessness and from headache, and was unable to raise her head without experiencing vertigo. An examination of the urine showed a little albumin and the presence of fatty and hyaline casts. She had a high tension pulse, and the heart was found to be dilated and extremely weak. At the end of two months, notwithstanding the use of various cardiac stimulants and also small doses of sodium iodide, the patient seemed to be losing ground. The daily output of urea at that time was only 120 grains, or about eight grams. She was then placed upon tincture of aconite, five drops every three hours continuously. When this was commenced she could not be turned in bed without much distress, but in a few days her improvement was very perceptible. The daily output of urea soon rose to 480 grains, and the heart's action became very much better. The aconite was kept up for six months, during which time she continued to improve. Twice during that period the aconite was reduced, but each time there was a return of the symptoms. At the end of the six months the nitrites were used in place of aconite for one month, erythrol tetranitrate being selected as having a more prolonged action than nitroglycerin. She began to fail again, however, and the output of urea went down to 150 grains. Accordingly, the aconite was resumed, and again the heart-action improved, while urea excretion increased to 450 grains. At the end of four months more the remedy was discontinued, and, under a carefully regulated mode of life, the patient has since steadily improved. In a large number of cases of kidney disease there can scarcely be a question that there is circulating in the blood a specific poison which is identical with the natural secretion of the suprarenal glands. The result of its action is that the heart hypertrophies, then dilates, and then fails. According to Dr. Thomson's observation, aconite is by far the most valuable of all remedies for dilating arterioles, and its effect generally lasts about three hours. In this case he believed that the heart was dilating and failing simply from overwork against the general arterial contraction.

Puerperal Eclampsia.—It was his opinion that it was a similar or identical poison with which we were confronted in some great emergency, such as puerperal convulsions. There is, however, another element, violent heart-action from excessive high tension in the arteries. In health there is a beautiful mechanism by which, whenever the tension rises, the vagus is stimulated to slow the heart; but in convulsions this inhibitory function is completely unbalanced. Should this continue, the intracranial pressure becomes so great that a *status epilepticus* sets in. Undoubtedly one of the best remedies for this condition of affairs is venesection. If bleeding is objected to, veratrum viride may be employed as a substitute for this, and it should be given in accordance to the symptoms present and the effect produced by it, and not simply in regulation doses. In cases of this kind aconite is too slow in its action, and it does not have the desired effect on the splanchnic area. Of veratrum viride

it has been remarked that it bleeds the patient into her own veins. The pathology of puerperal convulsions has been the subject of much speculation. By some it is claimed that in normal pregnancy there is always an increased secretion of the thyroid gland, and that the lack of this induces a condition which often results in the production of eclampsia.

Cases in Which Aconite Must be Given with Caution or is Contra-indicated.—There are a number of conditions of high arterial tension in which aconite must be given with considerable caution. In arteritis obliterans no vasomotor dilator can be of much use; therefore when one has senile heart with rigid arteries such agents should be given only under special circumstances. Thus, if the pulse is rapid, as well as of high tension, aconite may be administered until the pulse comes down to 80, when it should be discontinued. He spoke here of a very common class of cases which are characterized by diminution of urea elimination, and yet in which one would never think of giving aconite; cases in which the patients complain of a great variety of symptoms which are extremely puzzling. Two illustrative cases were described. One was in an elderly gentleman who suffered from a tingling in the legs below the knee, vertigo, and a species of hypochondriasis. Sometimes there was insomnia and sometimes overpowering drowsiness. The other patient was an army officer who, during the Cuban campaign had malarial fever, with colitis. Later, in Ecuador, he had an attack of rheumatism. He had delirium and was comatose for two weeks. For six weeks afterward he suffered from headaches and a continuance of general rheumatic symptoms. Dr. Thomson's experience had taught him that when a great variety of anonymous nervous symptoms are complained of, especially in men, it may generally be safely concluded that there is present a toxemia of either gastro-intestinal or renal origin. The daily output of urea should therefore always be investigated in such cases. In one of these patients the amount was but 13 grams, and in the other, 15 grams (instead of from 25 to 30).

Acute Nephritis.—The typical form of acute nephritis is the scarlatinal. There is no relation whatever between the severity of the scarlet fever and that of the kidney disease, nor does the desquamation apparently have anything to do with the latter. There is not much that can be done in the way of prophylaxis, though the oiling of the skin may perhaps do some good. When nephritis has developed, the first danger signal is to be found in a diminution of the excretion of urea and a fall in the specific gravity of the urine. These occur before any albumin or casts make their appearance. When nephritis has once declared itself, the treatment ought to be very energetic. Dr. Thomson believes that the most certain of all diuretics is the thorough douching of the rectum with three gallons, or more, of hot normal saline solution (at a temperature of 115° F.). For this purpose Kemp's rectal irrigating apparatus will be found very satisfactory. There seems to be a very close association between the kidneys and the bowels, so that the evacuation of the latter is almost invariably accompanied by the voiding of urine, even if the bladder has been emptied but a short time before. In scarlatina probably the best prophylaxis against both severe fever and nephritis is a nightly dose of calomel. He did not think we need ever despair of a case of scarlatinal nephritis, and mentioned one in which recovery took place after the patient had actually been pronounced dead. The treatment was commenced by touching the skin in the region of the kidneys with tablespoons taken out of boiling water, after the method suggested by Brown-Séquard, and on the seventh application the child opened its eyes and recovered consciousness.

Treatment and Prognosis.—In cases characterized by such symptoms as mental cloudiness, asthma, and Cheyne-Stokes respiration he has often been able to ward off trouble by securing free action of the bowels, followed by diuresis. For these purposes he gives a calomel cathartic, and afterward 10 grains of urotropin, with 10 grains of sodium benzoate, every two or three hours. He has never seen any bad results from urotropin when thus associated with the sodium salt. The prognosis in interstitial nephritis is always uncertain, as we can never feel sure how much working kidney the patient has left. The diet is a matter of great importance. The quantity of highly nitrogenous food consumed, especially red meats, must be limited. There appears to be normally a balance in the system, so that increased intake of food is offset by an increased excretion of urea. If the kidneys are diseased, however, this balance is interfered with, and thus it is that we so frequently find attacks of apoplexy following upon Christmas and Thanksgiving dinners. Another thing that must be taken into account is the different state of affairs at different hours of the day. In all cases of Graves' disease, and often in melancholia and various other affections, the patients are worse in the morning, while the first attack of gout or of peptic asthma often occurs after midnight. In regulating the mode of life of those past middle age who have rigid arteries and a high tension pulse, it should be advised to avoid hearty meals at night. He thought it unfortunate that two such different affections as chronic parenchymatous nephritis and chronic interstitial nephritis should go by the common name of Bright's disease, as he did not know of any two diseases affecting the same organ which differed so greatly. While the former occurs more frequently in the young than in the old, and often in children, chronic parenchymatous nephritis is almost invariably met with in middle and advanced life. In the interstitial form of renal disease the albumin in the urine is small in quantity and not infrequently absent, and constitutes an insignificant feature, while in the parenchymatous it is constant and abundant. In the one the patient is never water-logged, except the dropsy is due to cardiac complications, while in the other such a condition is a striking and marked characteristic; so that the two classes of patients present a totally different general appearance. As diverse as the clinical phenomena observed are the pathological changes in the kidneys themselves. In the large white kidney the capsule can be stripped off as readily as the peel of an orange, while in the small, contracted kidney, the capsule becomes so firmly adherent as to appear to form a part of the tissue of the organ. In parenchymatous nephritis the glomeruli are squeezed and pressed together, and the tubules are clogged with an accumulation of debris of all kinds. While we do not understand just how the dropsy accompanying this condition is produced, we readily appreciate that we have here found a blocking up which has all the marks of a mechanical obstruction capable of neutralizing all our therapeutic endeavors. What we seem to lack in the kidney is a double blood-current such as is met with in the lungs.

The Production of Albuminuria.—As to the production of albuminuria, one observation by Overbach is certainly very suggestive. The simple clamping by the renal arteries in dogs for forty minutes was followed by albuminuria which lasted for twenty days. The pressure effects of an intercellular exudation upon the glomeruli would seem to produce virtually the same condition, an arterial ischemia, and thus explain the albuminuria which is present. In the amyloid kidney there is a mechanical interference from another source, but which acts in the same way as the inflammatory exudation.